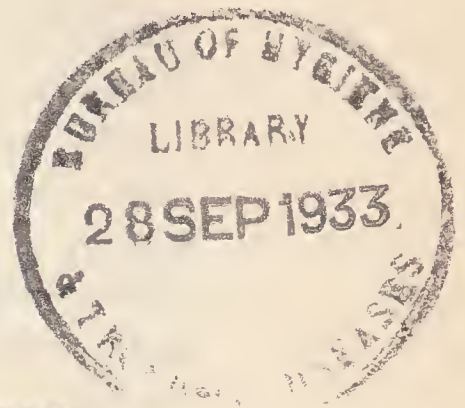


1933.

HERTFORDSHIRE COUNTY COUNCIL.



THIRTY-FOURTH ANNUAL REPORT ON THE

PUBLIC HEALTH

OF

HERTFORDSHIRE

BEING THAT FOR THE YEAR

1932

BY

H. HYSLOP THOMSON

M.D.; D.P.H.

County Medical Officer of Health.

44

CONTENTS

	PAGE
Introductory Letter	3
Statistical Summary	5
Population and Acreage	6
Birth-rate	6
Death-rate	7
Infant-Mortality... ..	7
Maternal Mortality	8
Cancer '	10
Tuberculosis	12
Venereal Diseases	16
Blind Persons	17
Mental Deficiency	20
Public Assistance and Public Health	22
Epidemic Diseases	26
Isolation Hospitals	31
Bacteriological Examinations	31
Public Vaccination	37
Nursing Homes	38
Maternity and Child Welfare	39
Infant Life Protection	40
Maternity Beds	42
Dental Treatment	45
Health Visitors, Nurses, and Midwives	49
Report of Inspector of Midwives and County Health Visitor	52
Sanitary Services in the County	57
Housing and Town Planning	70
Disposal of House-refuse ; Dumps	71
Dairies, Cowsheds, and Milkshops	72
Sale of Foods and Drugs Acts	72
Summary and Conclusions	74
Chief Statistics of Urban and Rural Districts	<i>facing</i> 74

**To the Chairman and Members of
the Public Health and Housing Committee.**

LADIES AND GENTLEMEN,

I have the honour of presenting to you the Annual Report on the Public Health of the County during the year 1932, being the thirty-fourth you have received.

The statistics for the year indicate that the general standard of health in the County during 1932 has been satisfactory; while the infant mortality and the death-rate from pulmonary tuberculosis are slightly higher, the maternal mortality and the death-rates from non-pulmonary tuberculosis, malignant disease, and epidemic disease are lower.

I am, Ladies and Gentlemen,

Your obedient servant,

H. HYSLOP THOMSON,

County Medical Officer of Health.

HERTFORD.

June, 1933.

Members of the Public Health and Housing Committee.

Chairman : Fern, H. E.

Anderson, H.	Goddard, S. J.
Attenborough, Mrs. G. E.	Goulding, A.
Ball, G.	Graveson, W.
Bartlett, A. R.	Grimwood, T. R.
*Blount, Miss M. B.	Halsey, C. H.
Bradford, Miss E. E. R.	Hart, W. B.
Bridger, H. J.	Hargreaves, A. A.
Bromet, A.	Haslam, R. H.
Bushby, G. H.	Lindgren, G. S.
Cannon, H.	Mitchell, P. G.
Clark, T. R.	Phillips, G.
Curtis, H. E.	Rutherford, D. C.
Dawson, R. J. W.	*Smith, Rev. Roland.
*Dockray, Dr. J. S.	*Stacey, W.
*Fern, H. E. (Chairman).	Vialou, A. B.
Ford, Amos.	Wallace, A.
Fordham, Mrs. P.	Wanklyn, J. A.
Franklin, E. J.	

Those marked * are members of the Sub-Committee as to County Medical Officer's Health's Reports.

District Medical Officers of Health.

<i>Name and Address.</i>	<i>District.</i>
Clarke, Dr. A. E., Council Offices, Rickmansworth.	Rickmansworth Urban.
Collins, Dr. E., The Elms.	Sawbridgeworth Urban.
Cox, Dr. W. J., Public Health Department, Watford.	Borough of Watford.
Fraser, Dr. H., Westlands, Harpenden.	Harpenden Urban.
Grattan, Dr. H. W., Public Health Department, Welwyn Garden City.	Welwyn Garden City Urban ; Hatfield and Welwyn Rural.
Gross, Dr. M., Town Hall, Hemel Hempstead.	Borough of Hemel Hempstead Berkhamstead and Tring Urban ; Berkhamstead and Hemel Hempstead Rural.
Grosvenor, Dr. A. A., Bowling Green, Stevenage.	Stevenage Urban.
Hardie, Dr. C. F., Wood Street, Barnet.	Barnet Urban and Rural.
Harvey, Dr. W., 25 King Street, Watford.	Bushey and Chorleywood Urban ; Watford Rural.
Macfadyen, Dr. N., 123 Norton Way, Letchworth.	Hitchin and Royston Urban ; Ashwell and Hitchin Rural.
McClymont, Dr. J., Clay Hill, Enfield.	Cheshunt Urban.
Paton, Dr. R. R. K., 36 St. Peter's Street, St. Albans.	City of St. Albans ; St. Albans Rural.
Rose, Dr. A. E., Council Offices, New Barnet.	East Barnet Valley Urban.
Suggit, Dr. B., Hitchin Street, Baldock.	Baldock and Letchworth Urban.
Whitelaw, Dr. A. D., The Castle, Hertford.	Borough of Hertford ; Bishop's Stortford, Hoddesdon, and Ware Urban ; Buntingford, Hadham, Hertford and, Ware Rural.



THE HEALTH OF THE COUNTY, 1932.

TABLE I.
STATISTICAL SUMMARY.
(For each District see Table at end of Report.)

	URBAN.			RURAL.			COUNTY.		
	1932. <i>a</i>	1931. <i>b</i>	10 years. † <i>c</i>	1932. <i>d</i>	1931. <i>e</i>	10 years. † <i>f</i>	1932. <i>g</i>	1931. <i>h</i>	10 years. † <i>i</i>
I. Population	289,000	281,000	246,245	124,400	120,900	111,265	413,400	401,900	366,132
II. Birth-rate ...	13·7	14·6	16·1	13·4	14·7	14·8	13·6	14·6	15·9
III. Death-rate	10·6	10·4	10·4	10·8	10·2	10·3	10·6	10·3	10·4
IV. Infant Mor- tality *	53	51	46	44	36	45	50	46	47
V. Epidemic Death-rate	·10	·12	—	·11	·19	—	·10	·11	—
VI. Phthisis Death-rate	·5	·5	·6	·4	·3	·5	·5	·4	·5
VII. Cancer Death-rate	1·4	1·6	1·4	1·5	1·4	1·3	1·4	1·5	1·3

† 1921-1930. * Per 1,000 Births.

The above figures give a summary of the vital statistics for the County during 1932. The estimated population for the year was 413,400, compared with 401,900 for last year. A study of the above table shows that there is a slight increase in the general death-rate, which was 10·6 compared with 10·3 for the previous year. There is a further fall in the birth-rate, which was 13·6 compared with 14·6 for 1931 and 15·3 for 1930.

There is a slight increase in the infant mortality, which was 50 compared with 46 for 1931. The previous lowest infant mortality attained was 42·2 in 1924. There is a further fall in the maternal mortality, which was 3·1 compared with 3·8 last year. There is a slight rise in the death-rate from pulmonary tuberculosis, namely 0·51 compared with 0·48 for 1931. On the other hand, the death-rate from non-pulmonary tuberculosis has slightly decreased, being 0·10 compared with 0·11. There is a further slight decrease in the epidemic death-rate, which was 0·10 compared with 0·11 for the previous year. It is satisfactory to note that the death-rate from malignant disease shows a slight decrease, 1·4 compared with 1·5 in 1931.

TABLE 2.
POPULATION AND ACREAGE.
(For each District see fly-leaf at end of Report.)

	Acreage (land and water).	POPULATION.			
		Census 1911.	Census 1921.	Census 1931.	Estimate 1932.
Urban Districts ...	70,048	194,263	229,059	280,945	289,000
Rural Districts ...	334,472	117,058	104,136	120,214	124,400
County ...	404,520	311,321	333,195	401,159	413,400
England & Wales ...	37,339,215	36,070,192	37,885,242	39,947,931	—

The 1931 census population for the County was 401,159, the population estimated last year was 401,900, and the estimated population for 1932 was 413,400.

This is an increase of 11,500, and it is the first time that a population of just over one person per acre has been reached.

TABLE 3.
BIRTH-RATE.

(For each District see fly-leaf at end of Report. For number of births, legitimate and illegitimate, in each district, see Table 6.)

	Hertfordshire.						England and Wales.
	Urban.		Rural.		County.		
	Rate.	Number.	Rate.	Number.	Rate.	Number.	
1911-20 .	18·0	—	18·2	—	18·1	—	21·8
1921-30 .	16·1	—	14·8	—	15·9	—	—
1931 .	14·6	4,118	14·7	1,781	14·6	5,899	15·8
1932 .	13·7	3,982	13·4	1,676	13·6	5,658	15·3

The birth-rate for 1932 shows a further decrease, being 13.6 compared with 14.6, the rate for the urban districts being 13.7 and for the rural 13.4. The highest birth-rate in the urban districts was 19.1 (Welwyn Garden City), which was also the highest last year, and the lowest 9.3 (Royston). In the rural districts the highest birth-rate was 15.4 (Barnet) and the lowest 10.8 (Hadham).

In only one urban district, namely Royston, did the death-rate exceed the birth-rate; the former exceeded the latter in four rural districts, namely Ashwell, Buntingford, Hadham, and Hertford.

TABLE 4.
DEATH-RATE.

(For each district see fly-leaf at end of Report. For causes see Tables 18 and 19.)

	Hertfordshire.						England and Wales.
	Urban.		Rural		County.		
	Rate.	Number.	Rate.	Number.	Rate.	Number.	
1911-20 .	11·6	—	11·6	—	11·6	—	14·3
1921-30 .	10·4	—	10·3	—	10·4	—	—
1931 .	10·4	2,937	10·2	1,236	10·3	4,173	12·3
1932 .	10·6	3,068	10·8	1,344	10·6	4,412	12·0

The death-rate shows a slight increase for 1932, being 10·6 compared with 10·3 for the previous year. The death-rate was higher in the rural districts, 10·8 compared with 10·6 for the urban districts. In the urban districts the highest death-rate was 14·3 (Royston) and the lowest 6·3 (Welwyn Garden City), which were the highest and lowest last year. In the rural districts the highest death-rate was 15·4 (Buntingford) and the lowest 7·9 (Barnet).

The slight rise in the general death-rate is due to some increase in the number of deaths from certain diseases such as pulmonary tuberculosis, influenza, pneumonia, cardiac disease, and cerebral hæmorrhage.

TABLE 5.
INFANT-MORTALITY.

	Hertfordshire.						England. and Wales.
	Urban.		Rural.		County.		
	Rate.	Number.	Rate.	Number.	Rate.	Number.	Rate.
1911-20 .	67	—	58	—	64	—	100
1921-30 .	46	—	45	—	47	—	—
1931 .	51	209	36	65	46	274	66
1932 .	53	211	44	73	50	284	65

The infant-mortality, which is the number of deaths under twelve months per 1,000 births, shows a slight rise from 46 to

50, the actual number of deaths being 284 compared with 274 for 1931. This increase affects both urban and rural districts, but it is more marked in the latter districts. Amongst urban districts there was no death under 12 months in Royston, and the same applies to the rural districts of Ashwell and Hemel Hempstead. The highest infant mortality in urban districts occurred in Baldock and in rural districts in Hertford. The reason for the increase in the infant mortality is to be found in an increase in the number of deaths from whooping cough, pneumonia, influenza, and infantile diarrhoea. It is satisfactory to be able to report some fall in the number of deaths from congenital debility and premature birth, which was 164 compared with 170 last year.

There has been a considerable increase in the mortality amongst illegitimate infants, which was 125.5 during 1932 compared with 78.2 during 1931. The death-rate in the urban districts was 106.1 compared with 192.3 in the rural districts.

There has been a slight increase in the number of deaths from diarrhoea under the age of twelve months, the figure being 17 compared with 10 last year. The deaths from tuberculosis were the same as last year, namely 4 in number.

For the prevention of epidemic diarrhoea in infants and young children efforts must be continued in the following directions: (1) The encouragement of the breast-feeding of infants, (2) the provision of a clean milk supply, (3) the attaining of a satisfactory standard of domiciliary cleanliness, (4) the abolition of refuse and flies, and (5) the protection of all milk in the home from contamination by dust and flies. The main precaution is cleanliness in regard to food utensils, food, and milk.

MATERNAL MORTALITY.

NUMBER OF DEATHS OF MOTHERS PER 1,000 BIRTHS.

The number of maternal deaths during the year was 18, compared with 23 last year and 27 in 1930. The maternal mortality was 3.1 compared with 3.8 last year and 4.5 in 1930. Of the 18 maternal deaths 7 were due to puerperal sepsis and 11 were due to other accidents and diseases of pregnancy and parturition, compared with 11 and 12 respectively for last year.

Fourteen of the 18 maternal deaths occurred in urban districts and 4 in rural districts. Of the 7 deaths due to puerperal sepsis 5 occurred in urban districts and 2 in rural

TABLE 6.
BIRTHS, DEATHS, AND INFANT DEATHS IN 1932.

Districts.	Popula- tion.	Deaths at all ages.	Births.			Number of infant deaths in first year.			Infant death- rates per 1,000 births.
			Legi- timate	Illegi- timate	Total.	Legi- timate	Illegi- timate	Total.	
<i>Urban.</i>									
1 Baldock . . .	3,285	45	53	2	55	7	—	7	127·27
2 Barnet . . .	15,420	162	181	8	189	6	1	7	37·03
3 Berkhamstead . .	8,485	89	105	6	111	8	—	8	72·07
4 Bishop's Stortford	9,913	118	112	10	122	10	—	10	81·96
5 Bushey . . .	11,610	111	148	10	158	7	—	7	44·30
6 Cheshunt . . .	14,960	164	214	5	219	16	1	17	77·62
7 Chorleywood . .	3,372	37	38	—	38	2	—	2	52·63
8 East Barnet Valley	19,640	185	267	10	277	13	—	13	46·93
9 Harpenden . . .	8,812	86	97	4	101	3	—	3	29·70
10 Hemel Hempstead	15,310	188	230	5	235	6	1	7	29·78
11 Hertford . . .	11,940	123	154	12	166	3	1	4	24·09
12 Hitchin . . .	14,550	169	192	8	200	15	—	15	75·00
13 Hoddesdon . . .	7,391	82	114	8	122	5	2	7	57·37
14 Letchworth . . .	14,580	118	154	7	161	9	1	10	62·11
15 Rickmansworth . .	10,970	114	139	5	144	10	1	11	76·38
16 Royston . . .	3,836	55	32	4	36	—	—	—	—
17 St. Albans . . .	29,470	326	370	15	385	15	—	15	38·96
18 Sawbridgeworth . .	2,696	29	32	2	34	2	—	2	58·82
19 Stevenage . . .	5,557	77	75	2	77	5	—	5	64·93
20 Tring . . .	4,435	47	66	—	66	1	—	1	15·15
21 Ware . . .	6,386	84	91	4	95	6	1	7	73·68
22 Watford . . .	57,400	602	777	42	819	35	10	45	54·94
23 Welwyn Gdn. City	8,982	57	162	10	172	8	—	8	46·51
Total Urban . . .	289,000	3,068	3,803	179	3,982	192	19	211	52·98
<i>Rural.</i>									
1 Ashwell . . .	3,476	46	38	—	38	—	—	—	—
2 Barnet . . .	6,656	53	96	7	103	4	—	4	38·83
3 Berkhamstead . .	5,243	62	62	1	63	4	—	4	63·49
4 Buntingford . . .	4,612	71	52	1	53	1	—	1	18·86
5 Hadham . . .	5,518	74	58	2	60	1	1	2	33·33
6 Hatfield . . .	11,840	122	171	4	175	11	1	12	68·57
7 Hemel Hempstead	8,557	96	118	4	122	—	—	—	—
8 Hertford . . .	7,671	102	92	3	95	8	1	9	94·73
9 Hitchin . . .	14,710	182	209	5	214	8	1	9	42·05
10 St. Albans . . .	20,300	164	254	11	265	7	2	9	33·96
11 Ware . . .	12,960	143	175	8	183	5	3	8	43·71
12 Watford . . .	19,020	183	254	5	259	12	1	13	50·19
13 Welwyn . . .	3,837	46	45	1	46	2	—	2	43·47
Total Rural . . .	124,400	1,344	1,624	52	1,676	63	10	73	43·55
„ Urban . . .	289,000	3,068	3,803	179	3,982	192	19	211	52·98
Total County . . .	413,400	4,412	5,427	231	5,658	255	29	284	50·19

Death-rate of Legitimate and Illegitimate Infants per 1,000 Legitimate and Illegitimate Births is :—

<i>Legitimate.</i>		<i>Illegitimate.</i>	
Urban Districts . . .	50·48	Urban Districts . . .	106·14
Rural	38·79	Rural	192·30
County	46·98	County	125·54

districts. The following are the districts in which deaths from sepsis occurred : the urban districts of Bishop's Stortford, East Barnet Valley, St. Albans, and Watford, and the rural districts of Hadham and Ware.

There were 19 cases of puerperal fever notified during the year, 17 from urban districts and 2 from rural districts. The largest number of cases notified from one district was 6.

There were 47 notifications of puerperal pyrexia received during the year compared with 66 last year.

The eleven deaths from causes other than puerperal sepsis occurred in the following districts : Bushey Urban (2), Cheshunt Urban (1), East Barnet Valley Urban (1), Hemel Hempstead Borough (1), Watford Borough (3), Welwyn Garden City Urban (1), Buntingford Rural (1), Ware Rural (1). Of the 11 deaths due to causes other than sepsis 9 occurred in urban districts and only two in rural districts.

The figures given above show that there has been a further decrease in the maternal mortality ; while it is satisfactory to note that the rate for the year is under 3 per 1,000 births further reduction must be secured ; not until the rate is continually under 2 per 1,000 births will the result of the efforts made be regarded as satisfactory.

The special measures which are adopted in the County include the services of an obstetric specialist in complicated cases, nursing services, hospital treatment, special sera, and help towards obtaining sterilized outfits in special cases. The provision for the hospital treatment of cases of puerperal sepsis include arrangements with several of the voluntary hospitals in the County.

TABLE 7.
CANCER OR MALIGNANT DISEASE.

(Including carcinoma and rodent ulcer. For each district see fly-leaf at end of Report.)

	Hertfordshire.						England and Wales.
	Urban.		Rural		County.		
	Rate.	Number.	Rate	Number.	Rate.	Number.	Rate.
1911-20 .	1.2	—	1.2	—	1.2	—	1.2
1921-30 .	1.4	—	1.3	—	1.3	—	—
1931 .	1.6	451	1.4	177	1.5	628	1.4
1932 .	1.4	410	1.5	191	1.4	601	—

It is satisfactory to be able to report a slight decrease in the death-rate from malignant disease.

The total number of deaths from this disease during the year was 601, compared with 628 for the previous year, which gives a death-rate of 1.4 compared with 1.5. Of the total number of deaths 410 were in urban districts and 191 in rural districts, and 307 were males and 294 were females compared with 277 and 351 respectively last year.

It will be observed that the decrease refers to the urban districts only, and that there is an increase in the number of deaths in rural districts.

A study of the sex incidence of the disease shows that the reduction has been due to decrease in the number of deaths amongst females, the deaths in males having increased. Of the total number of deaths 328 were over the age of 65 and 142 were over the age of 75. During the year particulars were obtained of 81 persons who had died in Public Assistance Institutions from malignant disease; the particulars are given in the following table :—

TABLE 8.

	MALES.					Totals.
	Under 40.	40-50.	50-60.	60-70.	Over 70.	
Gastro-intestinal .	1	2	6	7	8	24
Skin	—	—	—	1	—	1
Genito-urinary . .	1	—	3	3	2	9
Breast	—	—	—	—	—	—
Bone	—	1	—	—	—	1
Other Structures .	1	1	1	5	2	10
Totals	3	4	10	16	12	45

	FEMALES.					Totals.
	Under 40.	40-50.	50-60.	60-70.	Over 70.	
Gastro-intestinal .	—	1	1	2	4	8
Skin	—	—	—	—	—	—
Genito-urinary . .	—	3	9	6	3	21
Breast	1	1	1	1	1	5
Bone	—	—	1	—	—	1
Other Structures .	—	—	1	—	—	1
Totals	1	5	13	9	8	36

During the year leaflets dealing with the importance of the early diagnosis of malignant disease and the necessity for early treatment have been printed and are being distributed through various agencies in the county.

TABLE 9.
TUBERCULOSIS.

CRUDE DEATH-RATES FROM PULMONARY TUBERCULOSIS.
(For each District see Fly-leaf at end of Report.)

	Hertfordshire.						England and Wales.
	Urban.		Rural.		County.		
	Rate.	Number.	Rate.	Number.	Rate.	Number.	
1911-20 .	.8	—	.7	—	.7	—	1.0
1921-30 .	.6	—	.5	—	.5	—	—
1931 .	.55	155	.33	40	.48	195	0.7
1932 .	.53	153	.47	58	.51	211	—

TABLE 10.
CRUDE DEATH-RATES FROM NON-PULMONARY TUBERCULOSIS

				Hertfordshire.		
				Urban.	Rural.	County.
1926 . . .				.18	.15	.17
1927 . . .				.14	.17	.15
1928 . . .				.15	.10	.13
1929 . . .				.16	.09	.14
1930 . . .				.10	.05	.08
1931 . . .				.11	.12	.11
1932 . . .				.12	.09	.10
Number, 1932 . . .				34	11	45

TABLE 11.
NEW CASES OF TUBERCULOSIS AND MORTALITY DURING 1932.

Age Periods.	New Cases.				Age Periods.	Deaths.			
	Pulmonary.		Non-Pulmonary.			Pulmonary.		Non-Pulmonary.	
	Male.	Female.	Male.	Female.		Male.	Female.	Male.	Female.
0	—	—	—	4	0	—	—	1	3
1	1	1	15	18	1	—	—	5	2
5	9	5	20	16	2	—	—	3	5
10	3	4	7	4	5	—	1	5	3
15	13	19	10	13	15	23	19	4	2
20	27	39	6	5	25	29	25	1	2
25	59	66	11	11	35	25	17	3	1
35	44	39	5	6	45	21	7	—	1
45	34	17	3	1	55	22	11	2	1
55	24	11	4	2	65	7	3	—	—
65 & Upwards	3	6	—	1	75	—	1	—	1
Total.	217	207	81	81	Total.	127	84	24	21

The number of cases of tuberculosis notified during the year is again less than last year, being 586 compared with 592.

The number of deaths from pulmonary tuberculosis during the year was 211 compared with 195 for the previous year, and the number of deaths from non-pulmonary tuberculosis was 45 compared with 47. The death-rates from both forms of the disease are 0·51 and 0·10 respectively compared with 0·48 and 0·11 for 1931.

The comparative death-rates from pulmonary and non-pulmonary tuberculosis during the past nine years are given in the following table :—

TABLE 12.

COMPARATIVE DEATH-RATES FROM TUBERCULOSIS.

	1932.	1931.	1930.	1929.	1928.	1927.	1926.	1925.	1924.
Pulmonary Tuberculosis	0·51	0·48	0·55	0·58	0·51	0·67	0·65	0·69	0·61
Non-Pulmonary Tuberculosis	0·10	0·11	0·08	0·14	0·13	0·15	0·17	0·14	0·13

Of the deaths from pulmonary tuberculosis, 153 occurred in urban districts compared with 155 last year ; and 58 in rural districts compared with 40 last year ; of the total number 127 were males and 84 were females, compared with 107 and 88 last year. In the urban districts the largest number of deaths, namely 40, occurred in the 25–35 age group ; this was also the group in rural districts with the greatest number of deaths, namely 14.

Reference to figures for the year shows that in urban districts deaths amongst males predominated except in the 25–35 age group, in which the figures are 19 males and 21 females ; in the rural districts the only group in which deaths amongst females predominated is the 15–25 age group, in which the deaths are males 2, females 6. There were no deaths during the year from pulmonary tuberculosis under the age of 5 years.

Of the deaths from non-pulmonary tuberculosis, 34 occurred in urban districts and 11 in rural districts compared with 32 and 15 respectively last year. It will thus be observed that while there is an increase of 2 deaths from this form of tuberculosis in the urban districts there is a decrease of 4 in the rural

districts ; in the case of pulmonary tuberculosis, on the other hand, there was an increase in the deaths in the rural districts and a decrease in the urban districts. Of the total number of deaths from non-pulmonary tuberculosis 19 or 42·2 per cent were under the age of 5 years whereas no deaths from the pulmonary form of the disease occurred under this age.

Preventive Measures.—The importance of these have been emphasized in previous reports. There is evidence that serious attempts are being made to provide improved housing conditions, and reference to the table dealing with reports regarding home conditions will show that some improvement has occurred in such conditions. The death-rate from pulmonary tuberculosis is an index of the general standard of health and resistance of the population. Anything which impairs resistance, such as bad home conditions, insufficient and unsuitable food, mental worry and anxiety, and such debilitating diseases as influenza, tends to impair resistance to active infection with the bacillus of tubercle ; this fact indicates the lines along which it is necessary to promote preventive measures.

The following steps are taken with a view to closer co-operation in preventive effort between the County Council and Local Sanitary Authorities. Information of all cases of pulmonary tuberculosis with tubercle bacilli in the sputum is sent to the District Medical Officer of Health. This supplements the information from notification and provides more accurate information regarding open cases of the disease.

Information is sent to the District Medical Officer of Health regarding the death of a patient and of removal of a patient to hospital or sanatorium so that disinfection may be carried out. The reports regarding the home conditions of patients forwarded by the health visitors and nurses contain from time to time references to insanitary conditions, structural defects, overcrowding, etc. The information thus obtained is forwarded to the District Medical Officer of Health with a request that such action may be taken as may be considered necessary.

With a view to securing the co-operation of the Medical Practitioner a special form is sent giving particulars regarding the result of examination by the Tuberculosis Officer, the result of the examination of the sputum and the treatment which has been recommended. Subsequent reports giving particulars of any special alteration in treatment are also sent.

During the year 384 home conditions forms were forwarded by the Health Visitors, from which the following particulars have been obtained.

TABLE 13.
HOME CONDITIONS.

	Good.	Indifferent.	Bad.
Insured	77·8	19·0	3·2
Uninsured	76·1	18·5	5·4
Total	77·0	18·7	4·3

NUMBER OF PERSONS PER BEDROOM.

	Two or less.	Three.	Four.	Over Four.
Insured	80·8	16·5	2·7	—
Uninsured	77·3	18·2	3·3	1·1
Total	79·1	17·3	3·0	0·6

Summary of New Work during the Year.—In the following tables particulars are given of the work carried out during the year in connection with tuberculosis, including recommendations for treatment in the case of new patients.

Number of cases examined	.	.	950
Cases treated in sanatoria	.	.	328
Cases treated in hospitals	.	.	93
Cases treated at home	.	.	340
Cases treated at dispensaries	.	.	109
Cases under observation	.	.	152
Contacts examined	.	.	107
Cases recommended milk	.	.	44
Shelters issued	.	.	14
Specimens of sputum examined	.	.	1,624
Tubercle bacilli present	.	.	529

Further particulars of the work carried out in connection with tuberculosis are given in the Annual Report on Tuberculosis for 1932.

VENEREAL DISEASES.

The number of new patients from Hertfordshire attending clinics in London during 1932 was 269 compared with 257 for 1931 and 303 for 1930. Of this number 148 were cases of venereal disease, and 121 were found not to be suffering from this disease. The total attendances for the year were 6,340 compared with 6,824 for 1931. The number of in-patient days was 694, and the number of doses of salvarsan or its substitutes given during the year was 684 compared with 744.

These figures of the work carried out during the year are to be regarded as satisfactory. It will be observed that the ratio of cases found not to be suffering from venereal disease is high, the figure being 121 compared with 86 last year. This indicates that increased use is being made of the clinics by suspected cases.

The amount of work carried out during the year is shown in the following table:—

TABLE 14.
ANNUAL SUMMARY FOR 1932.

Hospitals.	New Patients.					Total Atten- dances.	In- patient days.	Salvar- san. No. of doses.
	Syp.	S.C.	Gon.	Not V.D.	Total.			
Albert Dock	—	—	—	—	—	—	—	—
Royal Northern	10	1	8	16	35	661	2	88
Hospital for Sick Children, Gt. Ormond Street	4	—	—	13	17	115	12	75
Guy's	9	—	11	14	34	719	97	124
King's College	—	—	—	—	—	6	—	—
Metropolitan	—	—	—	—	—	—	—	—
Middlesex	1	—	6	2	9	335	13	49
Miller General	—	—	—	—	—	—	—	—
Royal Free	5	—	11	19	35	632	—	27
Royal London Ophthalmic	1	—	—	—	1	13	5	7
St. George's	1	—	5	3	9	123	—	12
St. John's, Lewisham	—	—	—	—	—	—	—	—
St. Mary's	—	—	2	1	3	58	—	1
St. Paul's	3	1	5	11	20	424	21	21
St. Thomas'	3	—	14	27	44	863	31	63
Seamen's	1	—	—	—	1	3	79	7
S. London for Women	—	—	—	1	1	2	—	—
University College	6	—	24	3	33	1,882	—	120
West London	—	—	1	1	2	69	—	22
Westminster	3	—	2	1	6	92	—	44
S. Army Mothers' Hospital	—	—	6	1	7	201	199	—
Children's Medical Home	—	—	1	—	1	—	235	—
Whitechapel Clinic	3	—	—	8	11	142	—	24
Total	50	2	96	121	269	6,340	694	684

The total number of pathological examinations made for private practitioners in the County during the year is 228.

The number of pathological examinations carried out for practitioners was 228, compared with 148 for the previous year, while the number of pathological examinations carried out for or at the centres in London was 1,934. Of these examinations, 13 were for spirochaetes, 1,118 for gonococci, 502 for Wassermann reaction, and 283 for other reasons.

BLIND PERSONS.

Under "The Blind Persons Act, 1920", the County Council prepared a scheme for promoting the welfare of blind persons ordinarily resident within their area, which came into operation on the 1st April, 1923.

Administrative Scheme.

Area.—The area to be covered for the purposes of this scheme is the Administrative County of Hertford.

Date of Commencement.—The scheme to come into operation on the first day of the month following its approval by the Minister of Health and on that day all previous schemes to be revoked.

Objects.—To provide in approved cases for :—

- (a) Children under School age.
- (b) Employment.
- (c) Home Workers.
- (d) Home Teachers.
- (e) Maintenance Grants in Homes.
- (f) Maintenance Grants in Hostels.
- (g) Assistance to unemployable or other destitute blind persons.
- (h) Registration.
- (j) General Social Welfare
- (k) Miscellaneous.

Arrangements for carrying out the various objects of the Scheme.

The County Council to avail themselves as far as they may deem necessary of the assistance of the Hertfordshire Society for the Blind, or other similar agency working on behalf of the blind, but no arrangements to be carried out under this

scheme with respect to any blind persons unless such arrangements shall have received the sanction of the County Council, or a Committee of the Council to whom the Council shall have delegated their powers.

(a) *Children under School Age.*

To consider cases of infants born blind, or with sight so defective as to be unable to distinguish common objects. When considered necessary by the County Council arrangements to be made for such children to be boarded out or sent to a residential home for blinded babies, and parents should be encouraged to contribute according to means.

This work will be carried out direct by the County Council.

(b) *Employment.*

Provision to be made, as far as the Council may deem necessary, for the employment of suitable blind persons in workshops for the blind or elsewhere, and for the payment to them of augmentation of earnings on a scale approved by the Council.

(c) *Home Workers.*

Arrangements to be made for the employment of suitable blind persons in the Home Workers' Scheme, conducted by the London Society for Teaching and Training the Blind, Swiss Cottage, or any other Society for the Blind performing similar functions approved by the Council from time to time; the general conditions of employment, including the rate of augmentation, to be subject to the approval of the Council.

(d) *Home Teachers.*

Arrangements to be made for the home teaching and visiting of the blind, and for this purpose the Hertfordshire Society for the Blind shall appoint such home teachers as may be approved by the Council.

(e) *Maintenance Grants in Homes.*

The County Council to make arrangements for the maintenance of blind persons whom it may be considered desirable to send to a Home for the Blind, which is approved by the Council.

(f) *Maintenance Grants in Hostels.*

The County Council to make arrangements for the maintenance of blind persons employed in approved workshops and

resident in a hostel approved by the Council, who, for lack of housing or for some other satisfactory reason, may require such provision.

(g) *Assistance to Unemployable or other Destitute Blind Persons.*

(i) In conjunction with the Public Assistance Committee, to consider the cases of unemployable or other destitute blind persons who are in need of institutional or other non-domiciliary assistance, and to render such assistance as may be desirable in each case, either by payment of recognized fees at approved homes for the blind, by boarding out, or otherwise.

(ii) To provide such domiciliary assistance as may be necessary to any blind person who, in accordance with the declaration made with regard to the domiciliary assistance of blind persons in the Council's Administrative Scheme under Part I of the Local Government Act, 1929, must be dealt with under the Blind Persons Act, 1920.

(h) *Registration.*

To arrange to provide a system of registration of all blind persons living within the area.

(j) *General Social Welfare.*

To make provision for the general social welfare of the blind.

(k) *Miscellaneous.*

To exercise any of the powers and duties of the County Council under Section 2 (1) of the Blind Persons Act, 1920.

REGULATIONS FOR ADMINISTRATION OF DOMICILIARY ASSISTANCE TO NECESSITOUS BLIND PERSONS.

(a) All applications for domiciliary assistance under the Blind Persons Act, 1920, shall be addressed to the Clerk of the County Council.

(b) Such applications for assistance shall be investigated by an officer of the County Council.

(c) The amount of domiciliary assistance to be given to necessitous blind persons shall be determined by the appropriate Committee upon the merits of each individual case and after taking into account the existing means of the blind person.

(d) All cases granted domiciliary assistance shall be reviewed in detail at least once in twelve months.

(e) The domiciliary grants shall be paid through the Hertfordshire Society for the Blind, or other similar agency working on behalf of the blind, weekly at the home of the

recipients, and the Society shall obtain a receipt for such payments on the prescribed form.

(f) These regulations shall come into operation on the 1st day of the month following its approval by the Minister of Health.

Registration.—A system of registration of all blind persons living within the area is carried out by the County Medical Officer of Health.

In carrying out the scheme described above, the County Council have secured the help and co-operation of the Hertfordshire Society for the Blind and the County Nursing Association. The register of blind persons in the County which has been prepared contained :—

		<i>Males.</i>	<i>Females.</i>	<i>Total.</i>
At 31st March, 1924	.	147	166	313
„ „ 1925	.	168	186	354
„ „ 1926	.	188	203	391
„ „ 1927	.	191	226	417
„ „ 1928	.	211	249	460
„ „ 1929	.	213	255	468
„ „ 1930	.	207	255	462
„ „ 1931	.	212	254	466
„ „ 1932	.	202	250	452

During 1932 there were added to the register 39 blind persons, compared with 51 last year, 19 males and 20 females. The number removed from the register during the year was 53, of which 29 were males and 24 were females; 94 cases are at present receiving grants from the County Council, 48 males and 46 females.

MENTAL DEFICIENCY.

The number of cases reported to the County Medical Officer during the year for examination as to their mental condition was 83 compared with 166 for the previous year. Of this number 58 were found to be mentally defective, 4 were epileptic, 2 were epileptic and feeble-minded, one was an epileptic imbecile, and one an epileptic idiot. The remainder either dull and backward or suffering from some form of physical defect associated with backwardness. The following is a definition of these various types: Idiot is a person so deeply defective from birth or early age as to be unable to guard himself against common physical dangers; imbecile is a person in whom from birth or early age there exists mental defectiveness not amounting to idiocy, yet so marked that a person is incapable of managing or being taught to manage his affairs; feeble-minded is a person in whom there exists from birth or early age mental defectiveness not amounting to imbecility but so pronounced

that they require care, supervision and control, or in the case of a child that he is permanently incapable of receiving proper benefit from instruction in ordinary schools.

Lunacy is a condition of mental disease or disorder due to various causes which occurs most frequently after adult life is reached.

Of the 83 cases reported upon, 47 were males and 36 were females, while 9 were above the age of 21 and 74 were below that age ; of these cases 51 were from urban districts and 32 were from rural districts.

During the year 25 cases were sent to certified institutions or were placed under guardianship, as against 22 in 1931. Of the 25 cases, 14 were feeble-minded, 10 were imbeciles, and 1 an idiot. Seven cases were sent to special residential institutions and 18 were placed under guardianship. With 5 exceptions, all the cases were over 16 years of age, the oldest being 44 and the youngest 3 years.

At the end of the year there were 295 mental defectives in certified institutions or places of safety. At the present time there are about 128 defectives on the waiting list for admission to certified institutions, in addition to many others who would be sent to certified institutions if accommodation were available.

During the year 30 children were admitted to Kingsmead School, and of these 14 were County children and 16 out-county children. The number of children discharged during the year was 23, of which 12 were County cases. At the end of the year there were in residence in the school 116 children under the age of 16 and 10 feeble-minded girls over 16, making a total of 126 in residence.

At the time of writing this report the Cell Barnes Colony has been opened for the admission of 30 females and 100 male defectives. It is expected that by the middle of June the whole accommodation will be available and that no difficulty will be experienced in dealing with urgent low grade cases. At the present time steps are being taken to transfer defectives from mental hospitals inside the County and from certified institutions elsewhere. The accommodation provided in Cell Barnes will set free accommodation in Mental Hospitals and Public Assistance Institutions which has been occupied by mental defectives and which will now be available for other purposes.

The necessity for placing defectives under guardianship will become less urgent owing to the accommodation available at Cell Barnes, but the value of guardianship for certain high-grade types must not be overlooked.

The Central Association for Mental Welfare arranged to deal with certain cases under guardianship by placing them

where they obtain training at a training centre. Arrangements are made for the payment of an annual fee of £15 in the case of a defective placed under guardianship in a district in which a training centre is available in order that the defective may benefit by instruction.

At the present time there are 66 mental defectives under guardianship in the County, of whom 35 are County cases and 31 out-county cases.

Visits are made by your County Medical Officer to Hertfordshire cases under guardianship in the County. The conditions of the home in which the defective is placed vary somewhat, but on the whole they appear to be well cared for. Some are well placed in good homes and are able to do useful work; there is little or no evidence of lack of necessary supervision, although in some cases, especially where the defective is placed under the guardianship of the parents, there is room for improvement in the home conditions.

The number of defectives to whom visits were paid by the nurses during 1932 was 446, and the number of visits paid was 2,329; of the 446 defectives, 240 were males and 206 were females, and of the 2,329 visits paid 1,194 were to males and 1,135 to females. During the year, 283 forms giving particulars regarding home conditions and circumstances of the defectives visited were received.

In the following table particulars are given of the position as regards mental defectives in the County at the end of the year. Further particulars are given in the Annual Report to the Committee under "The Mental Deficiency Act, 1913".

SUMMARY OF CASES AT END OF THE YEAR.

	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>
Defectives in Institutions	80	89	169
Under Guardianship County cases	29	36	65
Out-County cases	24	22	46
In Place of Safety	8	7	15
Under Statutory Supervision	152	145	297
Notified by Education Authority	57	45	102
Otherwise ascertained	128	141	269
Under consideration, as to whom it had not been decided whether they are subject to be dealt with or not	25	8	33

PUBLIC ASSISTANCE.

The main effort in connection with Public Assistance during the year has been directed towards consolidating and improving the service, more especially in regard to institutional accommodation and facilities for treatment. Consideration has also been

given to the relationship of the Public Assistance Service to other Health Services provided by the County Council so that overlapping may be avoided and complete co-ordination may be secured. When it is remembered that there are eight committees of the County Council dealing with matters relating to health and the prevention and treatment of disease it will be clear how necessary it is to take adequate measures to promote co-ordination so as to prevent overlapping.

The following table shows the existing accommodation in the County Institutions :—

Guardians Committee Area.	Institution.	SICK WARDS.			OTHER WARDS.			Total.
		Men.	Women.	Children.	Men.	Women.	Children.	
Barnet .	Barnet . . .	—	—	—	110	81	30	221
	„ Wellhouse Hospital	85	160	32	—	—	—	277
	Hatfield . . .	—	53	—	3	17	—	73
Bishop's Stortford	Bishop's Stortford	48	61	8	66	67	14	264
	Buntingford .	10	10	—	9	8	7	44
Dacorum .	Hemel Hempstead	23	29	4	57	26	7	146
	Berkhamsted .	16	23	2	14	21	7	83
East Herts	Ware . . .	22	16	2	78	62	10	190
Hitchin .	Hitchin . . .	34	38	—	89	48	18	227
St. Albans	St. Albans . .	58	80	—	61	49	18	266
Watford .	Watford . . .	142	157	14	133	102	30	578
Total . . .		438	627	62	620	478	141	2,369

Under agreements with Voluntary Hospitals :—

Hertford County Hospital	50
Bishop's Stortford Voluntary Hospital	20
Grand total	<u>2,439</u>

County Institutions.—During the year further progress has been made in improvements and extensions in connection with Public Assistance Institutions in the County. The completion of the extensions at the Hertford County Hospital and at the Bishop's Stortford Voluntary Hospital has made available 70 additional beds for acute cases ; the beds in the latter Hospital include maternity beds. The alterations and extensions at the Watford Public Assistance Institution have been completed, and they provide additional sick accommodation to the extent

of 30 beds for males and 31 for females. The extensions and improvements at the Bishop's Stortford Institution are at present being carried out and the advantage which will result from the provision of corridors in the old building is even now clearly shown ; an excellent nursery block for young children has also been erected. The accommodation at this Institution when the alterations are completed will provide for 54 additional beds. Increased accommodation for chronic cases will also be provided in connection with the extensions which will shortly be commenced at the Public Assistance Institutions at Hemel Hempstead and Ware. Such increased accommodation is urgently required, more especially in the central and south-eastern areas of the County. At Oster House, St. Albans, a block containing a children's ward on the ground floor and maternity accommodation on the first floor is being provided, which will meet a real want in the district. The provision of accommodation for children in the central part of the County will serve to minimize the difficulties which arise from time to time, owing to the absence of suitable accommodation for children in adjoining areas. At Hitchin very necessary improvements and alterations will shortly be commenced at Chalkdell House ; these have become increasingly necessary owing to the closure of the Institution at Royston for invalid cases, and which is being readapted so as to provide casual wards only. At Hitchin a nursery block for young children is being provided.

Special Services.—In connection with Public Assistance, special provision has to be made from time to time for the treatment of special cases, and Guardian Committees are frequently called upon to consider such cases. Arrangements now exist for the treatment of malignant disease by radium and deep X-ray therapy at the Cancer Free Hospital, Fulham Road, and a number of cases have recently been treated at that Institution. Cases of disease of special organs which require special treatment are sent to hospitals in London. During the year a consulting staff has been provided consisting of a consulting surgeon, consulting physician, and consulting mental expert for the whole county, so that the services of a consultant is made available for any patient in any Public Assistance Institution in the County. The question of out-patients requiring an expert medical opinion but who are unable to obtain it has also been under consideration. The position of out-patient clinics and to what extent they are necessary as supplementary to in-patient treatment has also received attention.

TABLE 15.
INFECTIOUS DISEASES

New cases, returned by District Medical Officers of Health, in the year ending 31st December, 1932.

District.	Civil Population. by Census 1931.	COMMONLY NOTIFIABLE.								
		C Smallpox.	D Scarlet Fever.	E Diphtheria.	F Enteric Fever.	G Puerperal Fever.	H Erysipelas.	I Ophthalmia Neonatorum.	Tuber- culosis.	
									J Pulmon- ary.	K Non-Pul- monary.
A	B	C	D	E	F	G	H	I	J	K
URBAN.										
1. Baldock	3,170	—	1	—	—	—	1	—	2	2
2. Barnet	14,726	—	19	25	—	2	12	—	14	10
3. Bishop's Stortford	9,510	—	24	1	—	2	1	1	9	4
4. Bushey	11,245	—	26	4	—	—	1	—	7	4
5. Cheshunt	14,656	—	60	5	—	—	7	—	12	10
6. Chorleywood	3,295	—	2	1	—	—	—	—	2	3
7. East Barnet Valley	18,549	—	17	9	—	—	3	—	28	7
8. Great Berkhamstead	8,052	—	15	1	—	—	1	—	6	3
9. Harpenden	8,349	—	15	—	—	—	—	—	5	2
10. Hemel Hempstead	15,119	—	11	2	—	3	2	1	21	6
11. Hertford	11,378	—	14	10	—	6	—	—	11	4
12. Hitchin	14,383	—	10	23	1	1	1	—	14	8
13. Hoddesdon	6,811	—	8	3	1	—	1	—	6	2
14. Letchworth	14,454	—	24	18	—	—	9	—	12	3
15. Rickmansworth	10,809	1	4	—	—	—	1	1	15	1
16. Royston	3,831	—	2	—	—	—	2	—	—	1
17. St. Albans	28,624	1	76	3	2	—	10	5	34	10
18. Sawbridgeworth	2,604	—	9	1	1	—	—	—	4	—
19. Stevenage	5,476	—	9	5	2	—	1	—	2	4
20. Tring	4,364	—	7	10	—	—	1	—	9	—
21. Ware	6,181	—	17	7	—	1	3	—	7	1
22. Watford	56,805	—	45	56	3	2	16	1	93	16
23. Welwyn Garden City	8,586	—	6	12	—	—	—	—	8	12
Total Urban	280,977	2	421	196	10	17	73	9	321	113
RURAL.										
1. Ashwell	3,485	—	1	—	—	—	—	1	1	5
2. Barnet	6,400	—	4	—	—	1	4	—	4	1
3. Berkhamstead	5,378	—	17	3	—	—	1	—	7	3
4. Buntingford	4,638	—	—	9	—	—	—	—	5	1
5. Hadham	5,471	—	7	—	—	—	—	—	7	2
6. Hatfield	11,001	—	7	—	—	—	—	—	12	7
7. Hemel Hempstead	8,270	—	32	—	—	—	1	—	6	3
8. Hertford	7,695	—	5	1	1	—	1	—	7	2
9. Hitchin	14,593	—	16	2	—	—	—	—	4	4
10. St. Albans	19,578	—	42	7	1	1	2	2	23	10
11. Ware	11,893	—	10	8	1	—	4	2	11	8
12. Watford	18,129	1	36	8	—	—	3	—	13	1
13. Welwyn	3,698	—	4	1	—	—	—	—	3	2
Total Rural	120,229	1	181	39	3	2	16	5	103	49
Total for County	401,206	3	602	235	13	19	89	14	424	162

EPIDEMIC DISEASES.

The death-rate from epidemic disease shows a slight decrease from 0·11 to 0·10. The total number of deaths from epidemic disease for 1932 was 44 compared with 47 for 1931; this decrease was confined to the urban districts, there being one more death in the rural districts.

TABLE 16.
DEATH-RATES FROM EPIDEMIC DISEASES.
(For each District see Fly-leaf at end of Report.)

	Hertfordshire.					
	Urban.		Rural.		County.	
	Rate.	Number.	Rate.	Number.	Rate.	Number.
1930	·20	55	·16	19	·19	74
1931	·12	34	·10	13	·11	47
1932	·10	30	·11	14	·10	44

The death-rate from epidemic disease was slightly higher in the rural districts; the highest rate reached being 0·46 (Ware Urban). In three urban districts the death-rate was over 0·2 per 1,000 and in nine urban districts there were no deaths from epidemic disease. In the rural districts the highest rate was 0·38 (Berkhampstead); in four districts the rate was over 0·2 per 1,000 and in six rural districts there were no deaths.

Smallpox.—There were 3 cases of smallpox notified during the year compared with one last year. Two of the cases were bargemen who came into the County from the Midlands.

Measles and Whooping-Cough.—The number of deaths from measles during the year was 8, compared with 4 last year, all in urban districts. All the deaths were in children over twelve months. There were 26 deaths from whooping-cough compared with 7 last year. The deaths were equally divided between the urban and rural districts. Of the 26 deaths 15 were under the age of twelve months compared with 4 last year; this is partly responsible for the increase in infant mortality.

Scarlet Fever.—There were 602 notifications of scarlet fever during the year compared with 561 notifications last year. There were 5 deaths from scarlet fever during the year, compared with nil last year. Of the 5 deaths one was an adult female and 4 others were children; no deaths under twelve months occurred.

Influenza.—The number of deaths from this disease was 125, compared with 89 during 1931. Of this number 99 occurred in urban districts and 26 in rural districts. In the urban districts the largest number of deaths occurred amongst females over 75 years of age. The disease was most fatal in old people, the total number of deaths in persons over the age of 65 being 65. Four deaths occurred under the age of twelve months compared with one last year.

Diphtheria.—There were 235 cases of diphtheria notified during the year compared with 290 in 1931, 196 in the urban districts and 39 in the rural districts. The highest number of notifications was received from Watford (56), Barnet (25), Hitchin (23), and from the rural districts of Buntingford (9) and Ware and Watford (8). There were 14 deaths from diphtheria compared with 17 last year, 13 in urban districts and one in rural districts; all the deaths occurred in children under the age of fifteen; one of these was under twelve months.

Enteric Fever and Paratyphoid Fever.—The total number of cases of enteric fever including typhoid and paratyphoid fever notified during the year was 25, compared with 27 last year; of this number, 17 were cases of enteric fever and 8 were cases of paratyphoid fever. Of the cases of typhoid fever, 13 were notified from urban districts and 4 from rural districts. The largest number of cases of enteric fever notified in one district was 4 (Watford). There were 4 deaths from enteric fever during the year.

Undulant Fever.—During the year 5 cases of undulant fever were notified. There were four cases in the following urban districts: Baldock, Hemel Hempstead, Hoddesdon, and Letchworth, and one in the Rural District of Ware. Careful investigations were carried out and many examinations of the milk and blood of the herds from which the milk consumed by the patients was taken were made. A high percentage of the cows reacted, indicating that at one time they had been infected with the Bc. Abortus, the dilutions reached in some cases being over 1-1,000. Sterilization of the milk or complete immunization of cows against contagious abortion is the only means of protection.

Puerperal Fever.—There were 19 cases of puerperal fever notified during the year compared with 25 last year, 17 in urban districts and 2 in rural districts. Forty-seven cases of puerperal pyrexia were notified compared with 66 last year, 43 in urban districts and 4 in rural districts. The largest

TABLE 17.—CAUSES OF DEATH AT DIFFERENT PERIODS OF

CAUSES OF DEATH.	Sex.	AGGREGATE OF URBAN DISTRICTS.									
		All Ages.	0—	1—	2—	5—	15—	25—	35—	45—	55—
All causes	M.	1527	126	17	15	34	62	62	68	144	267
	F.	1541	85	13	17	38	40	63	69	131	220
1. Typhoid and Para-typhoid Fevers . . .	M.	3	—	—	—	—	—	—	—	2	1
	F.	—	—	—	—	—	—	—	—	—	—
2. Measles	M.	3	—	—	—	2	—	1	—	—	—
	F.	5	—	1	2	2	—	—	—	—	—
3. Scarlet Fever	M.	1	—	—	—	1	—	—	—	—	—
	F.	2	—	—	—	1	—	1	—	—	—
4. Whooping-cough . . .	M.	5	3	2	—	—	—	—	—	—	—
	F.	8	4	3	1	—	—	—	—	—	—
5. Diphtheria	M.	6	—	1	—	5	—	—	—	—	—
	F.	7	1	—	2	4	—	—	—	—	—
6. Influenza	M.	46	3	—	—	3	1	—	—	4	12
	F.	53	—	—	1	3	3	2	6	3	3
7. Encephalitis Lethargica . . .	M.	1	—	—	—	—	—	—	—	—	1
	F.	5	—	—	—	—	—	—	—	1	4
8. Cerebro-spinal Fever . . .	M.	2	1	—	—	—	1	—	—	—	—
	F.	1	—	—	—	—	1	—	—	—	—
9. Tuberculosis of Respiratory System . . .	M.	94	—	—	—	—	21	19	17	14	18
	F.	59	—	—	—	1	13	21	12	1	7
10. Other Tuberculous Diseases	M.	15	1	4	—	3	3	—	2	—	2
	F.	19	2	2	5	2	2	2	1	1	1
11. Syphilis	M.	2	—	—	—	—	—	—	—	2	—
	F.	1	1	—	—	—	—	—	—	—	—
12. General Paralysis of the Insane (<i>tabes dorsalis</i>) . .	M.	11	—	—	—	—	—	—	—	2	6
	F.	1	—	—	—	—	—	—	—	—	1
13. Cancer, Malignant Disease	M.	214	—	—	1	—	—	1	8	28	63
	F.	196	—	—	—	2	1	1	8	37	39
14. Diabetes	M.	16	—	—	—	1	—	—	—	1	5
	F.	26	—	—	—	—	1	1	1	2	6
15. Cerebral Hæmorrhage, etc.	M.	87	—	—	—	—	—	1	—	3	17
	F.	95	—	—	—	—	—	—	3	9	15
16. Heart Disease	M.	310	—	—	—	—	2	1	4	19	54
	F.	400	—	—	—	2	2	4	8	14	56
17. Aneurysm	M.	4	—	—	—	—	—	—	—	1	—
	F.	2	—	—	—	—	—	—	—	1	1
18. Other Circulatory Diseases	M.	64	—	—	—	—	—	1	—	1	11
	F.	80	—	—	—	1	—	—	—	6	11
19. Bronchitis	M.	56	6	1	1	—	—	—	—	3	3
	F.	51	2	1	1	—	—	—	—	3	2
20. Pneumonia (all forms) . .	M.	86	15	3	5	—	1	6	6	11	11
	F.	71	12	2	1	3	3	5	4	5	10
21. Other Respiratory Diseases	M.	17	—	1	—	—	1	—	1	4	2
	F.	11	—	—	1	—	—	—	2	1	1
22. Peptic Ulcer	M.	19	—	—	—	—	1	1	3	8	4
	F.	6	—	—	—	—	—	—	—	3	1
23. Diarrhœa, etc. . . .	M.	11	8	1	—	—	—	—	—	—	1
	F.	11	6	—	—	—	—	—	—	1	2
24. Appendicitis	M.	11	—	—	—	2	—	1	1	1	5
	F.	12	—	—	—	1	—	1	—	6	1
25. Cirrhosis of Liver . . .	M.	4	—	—	—	—	—	—	—	1	1
	F.	6	—	—	—	1	—	—	—	1	4
26. Other Diseases of Liver, etc.	M.	6	—	—	—	—	1	—	—	1	1
	F.	9	—	—	—	—	1	—	1	2	—
27. Other Digestive Diseases . . .	M.	33	4	—	1	1	1	1	4	6	2
	F.	37	1	—	1	4	1	1	3	4	8
28. Acute and Chronic Nephritis	M.	40	—	—	—	1	1	2	2	6	8
	F.	39	—	—	—	1	1	4	1	4	11
29. Puerperal Sepsis	F.	5	—	—	—	—	—	3	2	—	—
30. Other Puerperal Causes . . .	F.	9	—	—	—	—	1	5	3	—	—
31. Congenital Debility, Premature Birth, Malformations, etc. . . .	M.	82	78	2	—	1	—	—	—	1	—
	F.	53	52	1	—	—	—	—	—	—	—
32. Senility	M.	21	—	—	—	—	—	—	—	—	1
	F.	66	—	—	—	—	—	—	—	—	—
33. Suicide	M.	17	—	—	—	—	—	4	2	6	4
	F.	12	—	—	—	—	1	1	—	1	5
34. Other Violence	M.	77	2	—	3	7	14	15	8	5	11
	F.	42	1	—	—	3	3	4	1	3	9
35. Other Defined Diseases . . .	M.	154	4	2	4	7	14	8	10	13	23
	F.	135	3	3	2	7	6	7	13	22	20
36. Causes Ill-defined or Unknown	M.	9	1	—	—	—	—	—	—	1	—
	F.	6	—	—	—	—	—	—	—	—	2

LIFE IN THE ADMINISTRATIVE COUNTY OF HERTFORD, 1932.

AGGREGATE OF RURAL DISTRICTS.													
65—	75—	All ages.	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—
362	370	687	45	6	12	15	33	26	40	44	96	171	199
312	553	657	28	11	8	11	13	20	30	62	95	143	236
—	—	1	—	—	—	—	—	—	—	1	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	2	—	—	2	—	—	—	—	—	—	—	—
—	—	4	2	1	1	—	—	—	—	—	—	—	—
—	—	9	6	3	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	1	—	—	—	1	—	—	—	—	—	—	—
13	10	12	1	—	1	1	—	1	1	1	1	3	2
15	17	14	—	—	—	—	1	—	2	2	4	2	3
—	—	3	—	—	—	—	—	—	1	1	—	1	—
—	—	2	—	—	—	1	—	1	—	—	—	—	—
—	—	2	—	1	—	—	—	—	1	—	—	—	—
—	—	2	2	—	—	—	—	—	—	—	—	—	—
5	—	33	—	—	—	—	2	10	8	7	4	2	—
3	1	25	—	—	—	—	6	4	5	6	4	—	—
—	—	9	—	1	3	2	1	1	1	—	—	—	—
—	1	2	1	—	—	1	—	—	—	—	—	—	—
—	—	1	—	—	—	—	—	—	1	—	—	—	—
—	—	1	—	—	—	—	—	—	—	—	—	—	—
3	—	4	—	—	—	—	—	—	1	2	1	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
70	43	93	—	—	—	—	2	—	1	6	25	37	22
50	58	98	—	—	—	—	—	1	7	14	28	29	19
5	4	6	—	—	—	—	—	—	—	—	1	2	2
7	8	8	—	—	—	—	—	—	—	2	3	1	2
29	37	28	—	—	—	—	—	—	—	1	7	9	11
23	45	46	—	—	—	—	—	—	2	5	8	16	15
101	129	144	—	—	—	—	5	2	2	3	21	50	61
108	206	166	—	—	—	1	—	2	2	10	20	49	82
2	1	1	—	—	—	—	—	—	1	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
26	25	28	—	—	—	—	—	—	—	1	—	11	16
17	45	34	—	—	—	—	—	—	—	1	3	9	21
15	27	26	—	1	—	—	1	1	1	—	1	2	19
6	36	25	—	—	—	—	—	—	—	—	1	4	20
17	11	49	7	1	—	1	2	3	1	2	8	13	11
11	15	35	6	4	3	—	—	2	4	—	5	4	7
3	5	7	—	—	—	—	1	—	1	—	1	1	3
1	5	8	—	—	—	—	1	—	—	—	—	1	5
1	1	8	—	—	—	—	—	—	—	1	4	3	—
1	1	3	—	—	—	—	—	—	1	—	1	1	—
—	1	5	3	—	—	—	—	—	—	—	—	—	2
2	—	1	—	—	—	1	—	—	—	—	—	—	—
1	—	6	—	—	1	1	1	—	—	3	—	—	—
2	1	5	—	—	1	1	—	1	—	2	—	—	—
2	—	3	—	—	—	—	—	—	2	—	—	1	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	1	4	—	—	—	—	—	—	1	—	1	—	2
1	4	3	—	—	—	—	—	—	—	—	1	1	1
9	4	14	1	—	—	3	—	—	1	—	2	3	3
8	6	21	2	—	—	—	—	1	1	3	2	7	5
12	8	14	—	—	—	—	1	—	—	—	5	4	4
11	6	18	—	—	—	—	—	1	1	1	4	6	5
—	—	2	—	—	—	—	—	2	—	—	—	—	—
—	—	2	—	—	—	—	—	—	2	—	—	—	—
—	—	24	24	—	—	—	—	—	—	—	—	—	—
—	—	11	10	1	—	—	—	—	—	—	—	—	—
3	17	24	—	—	—	—	—	—	—	—	—	3	21
3	63	38	—	—	—	—	—	—	—	—	—	4	34
1	—	11	—	—	—	—	1	—	3	4	2	1	—
4	—	4	—	—	—	—	—	—	1	1	2	—	—
5	7	50	4	—	2	5	9	7	5	6	4	5	3
4	14	22	—	2	—	1	3	2	—	3	3	—	8
34	35	66	3	1	4	2	7	—	6	5	7	19	12
33	19	46	1	1	2	4	2	2	2	11	6	8	7
3	4	7	—	—	—	—	—	—	—	—	1	1	5
2	2	3	—	—	—	—	—	—	—	—	—	1	2

number of cases of puerperal fever notified in urban districts was 6 (Hertford) and 3 (Hemel Hempstead). The deaths from puerperal fever numbered 7, 5 in urban districts and 2 in rural districts, compared with 11 last year.

Erysipelas.—There were 89 cases of erysipelas notified during the year, 73 in urban districts and 16 in rural districts, compared with 105 for the previous year, but no information is available regarding the actual number of deaths in the County from this cause. The largest number notified in the urban districts was 16 (Watford), 12 (Barnet), and 10 (St. Albans), and in the rural districts 4 (Barnet and Ware).

Meningococcal Meningitis and Encephalitis Lethargica.—There were 7 notifications of meningococcal meningitis, the same as last year, 6 in the urban and 1 in the rural districts. There were 7 deaths from this disease, compared with 6 last year. There were 10 notifications of encephalitis lethargica, 9 in urban districts and 1 in the rural districts, and there were 11 deaths from this disease, of which 4 were males and 7 were females.

Polioencephalitis and Poliomyelitis.—There were 4 cases of poliomyelitis notified during the year; there was one death from this cause; there were 2 deaths from polioencephalitis.

Pneumonia and Broncho-pneumonia.—There were 256 cases of pneumonia, including influenzal pneumonia, notified during the year, compared with 279 last year, the number of deaths from this cause being 241 compared with 239 last year. There were 157 deaths in urban districts and 84 in rural districts; the deaths in urban districts being reduced, but those in rural districts increased. The largest number of deaths, as is usually the case, occurred at the extremes of life: under twelve months 40, between 65 and 75 years 45, and over 75 years 44.

Bronchitis.—The number of deaths from bronchitis was 158, compared with 177 last year. The number of deaths in urban districts was 107 and in rural districts 51 compared with 115 and 62 last year. Of the total number of deaths from bronchitis 82 were males and 76 were females. There were 8 deaths from bronchitis under the age of twelve months compared with 5 last year, all in urban districts. Of the total number of deaths from bronchitis 102 were over the age of 75.

Heart Disease.—There is an increase in the number of deaths from heart disease, which was 1,020, compared with

959 for 1931. Of the total number 710 were in urban and 310 in rural districts, and 454 were males and 566 were females. Of the total number of deaths from cardiac disease 786 were above the age of 65. Under the age of 45 there were 37 deaths from heart disease, 23 in urban districts, and 14 in rural districts, compared with 57 last year.

Other Diseases.—The number of deaths from acute and chronic Bright's disease was 111 compared with 177 last year. The number of deaths from cerebral hæmorrhage was 256 compared with 196. The number of deaths from cirrhosis of the liver was 13 as compared with 15 last year. The deaths from appendicitis were 34 as compared with 32 last year. There were 56 deaths from diabetes during the year, 42 in urban districts and 14 in rural districts. Of the total number of deaths there were 31 in persons over the age of 65.

Other Notifiable Diseases.—During the year one case of dysentery was notified compared with 23 last year. The number of cases of ophthalmia neonatorum notified during the year was 14 compared with 7 last year. Three cases of malaria were notified during the year, compared with 6 last year.

ISOLATION HOSPITALS.

There is no change to report in regard to the position of the isolation hospitals in the County. In a previous report particulars were given of the extent of the accommodation provided in these hospitals and as to the desirability of pooling accommodation so as to provide that existing accommodation met the requirements of the County as a whole.

The scheme which was drawn up some time ago as to the steps which should be taken to secure adequate and efficient isolation hospital accommodation has had to be held up until the important question of boundaries has been finally settled. One practical result of the scheme, however, has been the closing of 2 small-pox hospitals in the County, which leaves 4 of these hospitals instead of 6.

BACTERIOLOGICAL EXAMINATIONS.

Arrangements are now made with the laboratory at the Hill End Mental Hospital for the bacteriological examination of sputum and other specimens. These arrangements have

TABLE 18.—CAUSES OF DEATHS

CAUSES OF DEATH.	Baldock.		Barnet.		Berkhamstead.		Bishop's Stortford.		Bushey.		Cheshunt.		Chorleywood.		E. Barnet Valley.		Harpenden.		Hemel Hempstead	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1 Typhoid & Paratyphoid Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2 Smallpox ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3 Measles ... ..	...	...	...	...	...	...	...	1	...	...	...	...	...	...	2	2	...	...	...	...
4 Scarlet-fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
5 Whooping-cough ... ..	...	1	...	2	...	...	...	1	...	...	1	1	...	...	1	...	...	...	2	1
6 Diphtheria ... ..	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...
7 Influenza ... ..	...	...	2	8	1	1	9	...	1	1	2	8	2	2	1	1	...	1	1	1
8 Encephalitis Lethargica ... ..	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	1
9 Cerebro-spinal Fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10 Tuberculosis of Respirat'y Sys'm	1	2	9	1	1	1	1	3	3	1	1	1	3	1	4	4	...	2	13	2
11 Other Tuberculous Diseases ... ..	...	...	...	1	1	...	...	1	...	...	3	...	...	...	1	...	1	...	...	3
12 Syphilis ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13 General Paralysis of the Insane (<i>tabes dorsalis</i>) ... ..	...	...	...	1	1	...	...	...	1	...	...	...	...	...	1	...	1	...	...	...
14 Cancer, Malignant Disease	3	3	16	9	4	11	9	7	8	4	9	7	...	4	15	15	8	7	13	5
15 Diabetes ... ..	...	1	1	2	...	1	...	3	1	1	...	4	1	1	1	2	1	1	2	...
16 Cerebral Hæmorrhage, etc.	2	1	2	...	...	...	2	2	4	3	3	7	3	1	4	7	...	2	2	1
17 Heart Disease	3	2	29	20	10	17	10	19	8	11	25	17	1	3	17	28	11	16	26	45
18 Aneurysm ... ..	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
19 Other Circulatory Diseases ... ..	...	4	3	3	2	1	4	1	3	5	3	5	...	...	3	4	7	2	6	5
20 Bronchitis ... ..	...	...	1	1	4	4	1	1	2	2	5	3	2	...	3	3	...	1	1	2
21 Pneumonia (all forms) ..	3	3	3	6	5	1	2	3	6	2	6	4	...	...	4	3	...	3	3	4
22 Other Respiratory Diseases ... ..	...	...	...	1	...	2	1	2	2	...	2	...	...	...	...	...	1	...	...	...
23 Peptic Ulcer ... ..	...	...	...	...	...	...	...	1	1	...	...	...	1	...	6	1	2	...	1	...
24 Diarrhœa, etc. (under 2 years)	...	1	1	...	...	...	...	...	...	...	2	...	...	...	...	1	...	...	...	...
25 Appendicitis ... ..	...	...	...	1	...	...	...	...	2	...	1	1	...	...	2	1	...	...	...	1
26 Cirrhosis of Liver ... ..	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...
27 Other Diseases of the Liver, etc.	...	...	...	1	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...
28 Other Digestive Diseases ... ..	...	2	1	1	2	...	1	3	...	2	3	1	1	...	...	1	1	1	1	2
29 Acute and Chronic Nephritis	2	1	2	2	...	1	2	1	2	1	3	5	...	2	1	3	3	...	2	4
30 Puerperal Sepsis ... ..	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...
31 Other Puerperal causes ... ..	...	...	...	...	...	...	...	...	2	...	1	...	...	...	...	1	...	...	...	1
32 Congenital Debility and Malformation, Premature Birth	2	1	3	...	5	2	4	3	3	3	7	3	1	...	6	1	1	2	...	3
33 Senility ... ..	...	...	1	4	...	...	1	...	2	2	1	...	...	...	1	2	...	1	...	1
34 Suicide	1	2	1	...	1	...	1	...	...	2	1	...	...	...	1	1	1	1	1	...
35 Other Deaths from Violence ... ..	...	...	5	1	2	1	1	...	4	2	5	1	...	1	5	5	1	1	6	1
36 Other Defined Diseases	1	1	6	10	6	1	8	5	10	3	5	3	4	3	10	8	3	2	10	14
37 Causes Ill-defined or Unknown	...	2	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
All causes... ..	18	27	87	75	45	44	57	61	64	47	91	73	19	18	89	96	42	44	91	97
Total	45		162		89		118		111		164		37		185		86		188	

Watford Boro. Polio-myelitis 1 } Included in 36 above.
 Barnet U. D. Polio-encephalitis 1 }

BETWEEN SEXES IN URBAN DISTRICTS, 1932.

Hertford Borough.		Hitchin.		Hoddesdon.		Letchworth.		Rickmansworth.		Royston.		St. Albans City.		Sawbridge worth.		Stevenage.		Tring.		Ware.		Watford.		Welwyn Garden City.		TOTAL.	Causes of Death.
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M. & F.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	3	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	...	8	3
...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	3	4	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	13	5	
1	...	...	...	...	...	2	...	...	...	...	...	1	...	...	1	...	1	...	...	...	3	2	...	...	13	6	
1	1	6	6	...	...	1	3	6	2	1	1	4	3	...	...	1	1	...	...	1	...	6	13	...	...	99	7
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	...	...	6	8
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	3	9
8	...	5	3	1	1	4	2	3	4	1	1	11	16	...	...	2	...	1	3	...	20	10	2	1	153	10	
..	2	..	2	...	...	...	...	...	1	...	...	...	4	1	...	1	...	...	...	1	1	3	6	1	34	11	
...	...	..	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	3	12	
1	...	...	...	...	...	1	...	1	..	1	...	...	...	...	...	...	...	...	2	...	1	...	...	..	12	13	
7	9	9	14	8	4	9	7	10	5	3	7	25	24	2	1	5	3	1	2	6	6	40	36	4	6	410	14
1	1	...	...	...	1	...	..	3	...	1	1	1	1	...	...	...	...	1	...	...	3	5	...	...	42	15	
6	3	13	12	1	3	2	4	3	1	3	2	7	7	...	1	3	4	3	6	3	4	21	24	...	..	182	16
6	18	14	11	8	7	7	7	8	20	4	7	35	55	6	5	9	10	3	8	12	10	55	60	3	4	710	17
...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	1	1	...	6	18
3	3	...	1	2	1	4	12	1	2	...	..	6	7	1	...	3	3	1	1	2	3	9	15	1	2	144	19
3	2	3	6	3	3	3	...	4	3	1	2	4	5	1	...	2	...	2	2	3	2	8	9	...	...	107	20
6	1	3	7	2	11	4	...	1	...	3	...	4	8	..	...	4	1	...	...	3	1	23	11	1	2	157	21
1	...	...	1	1	1	...	...	...	...	2	...	...	3	...	...	1	...	...	...	...	...	5	1	1	...	28	22
1	...	2	1	1	..	...	..	...	...	...	...	...	2	...	...	...	...	...	...	...	...	4	1	..	...	25	23
...	...	1	1	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	2	..	2	2	...	..	15	24
..	...	1	1	1	...	1	..	...	1	...	1	...	1	...	...	...	...	...	...	...	...	2	4	1	...	23	25
...	...	...	...	...	...	...	1	...	1	...	...	...	2	...	...	...	...	1	...	...	3	..	...	...	10	26	
1	..	...	1	...	...	...	...	...	...	...	...	3	...	...	..	...	1	...	2	...	...	1	3	...	...	15	27
1	3	2	5	1	2	3	3	..	2	...	...	4	1	...	...	3	...	...	1	...	2	9	8	2	2	77	28
..	...	...	...	1	1	2	2	3	1	1	...	2	7	1	..	1	...	1	1	1	...	8	6	2	1	79	29
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	2	...	...	5	30
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	3	...	1	9	31
1	2	3	4	1	1	3	4	3	3	1	...	9	2	2	...	...	1	1	...	5	1	20	13	1	4	135	32
1	4	3	8	...	1	3	3	...	4	1	3	...	6	1	2	2	5	...	2	...	1	4	16	...	1	87	33
...	...	...	1	1	1	1	1	..	...	..	...	2	2	...	..	...	...	1	...	...	...	4	1	...	..	29	34
3	3	6	1	2	...	2	1	2	5	1	1	9	5	...	...	3	1	1	1	2	1	17	9	...	1	119	35
9	9	6	2	6	2	7	4	5	5	1	4	20	12	1	3	1	1	1	3	1	3	31	34	2	3	289	36
..	...	3	1	1	...	2	1	...	...	...	...	..	...	...	...	2	1	...	...	...	...	...	1	...	...	15	37
62	61	80	89	42	40	62	56	53	61	25	30	149	177	16	13	41	36	15	32	46	38	306	296	27	30		
123		169		82		118		114		55		326		29		77		47		84		602		57		3068	

TABLE 19.—CAUSES OF DEATH BETWEEN SEXES

CAUSES OF DEATH.	Ashwell.		Barnet.		Berkhampstead.		Buntingford.		Hadham.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1 Typhoid and Paratyphoid Fever ...	...	...	...	...	...	...	...	...	...	...
2 Smallpox ... ..	...	...	...	...	...	...	...	...	...	...
3 Measles ... ..	...	...	...	...	...	...	...	...	...	...
4 Scarlet Fever ... ..	...	...	...	...	...	...	...	...	...	...
5 Whooping-cough ... ..	...	...	2	...	...	...	...	...	...	...
6 Diphtheria ... ..	...	...	...	...	...	...	...	...	...	...
7 Influenza ... ..	...	...	2	...	...	2	...	...	1	...
8 Encephalitis Lethargica ... ..	...	...	...	...	1	...	1	...	...	...
9 Cerebro-spinal Fever ... ..	...	...	...	...	...	...	...	...	...	...
10 Tuberculosis of Respiratory System ...	...	...	...	1	2	3	3	...	2	1
11 Other Tuberculous Diseases ... ..	...	...	...	...	...	...	...	...	...	1
12 Syphilis ... ..	...	...	1	...	...	...	...	...	...	...
13 General Paralysis of the Insane (<i>tabes dorsalis</i>)	...	...	1	...	...	...	...	...	...	...
14 Cancer, Malignant Disease . . .	3	5	2	1	5	2	1	4	6	2
15 Diabetes .. . . .	...	...	...	...	...	...	...	...	...	...
16 Cerebral Hæmorrhage, etc. .. .	3	2	...	1	...	2	...	3	2	1
17 Heart Disease	5	6	9	3	9	14	8	13	10	3
18 Aneurysm ... ..	...	...	...	...	...	...	...	...	...	...
19 Other Circulatory Diseases ... ..	...	1	1	...	...	1	3	...	3	7
20 Bronchitis	1	1	...	...	5	1	...	2	1	3
21 Pneumonia (all forms) ... ..	...	1	...	4	...	1	7	2	2	1
22 Other Respiratory Diseases .. .	...	1	1	2	...	1	...	1	1	...
23 Peptic Ulcer	1	...	...	1	1	...	1	1	...	...
24 Diarrhœa, etc. (under two years) ...	...	...	...	...	...	...	...	...	...	...
25 Appendicitis ... ..	...	...	...	...	...	...	...	...	...	2
26 Cirrhosis of Liver ... ..	...	...	...	...	...	...	1	...	...	...
27 Other Diseases of Liver, etc. ... ..	...	...	...	1	...	...	...	...	1	1
28 Other Digestive Diseases ... ..	...	1	2	2	2	1	1	4	1	2
29 Acute and Chronic Nephritis... ..	...	...	...	1	...	...	...	1	...	1
30 Puerperal Sepsis ... ..	...	...	...	...	...	...	...	...	...	1
31 Other Puerperal Causes ... ..	...	...	...	...	...	...	...	1	...	...
32 Congenital Debility and Malformation, Premature Birth	...	...	2	...	2	...	...	...	1	...
33 Senility	2	5	2	...	...	2	2	...	2	4
34 Suicide ... ..	...	...	1	...	1	1	...	...	...	...
35 Other Deaths from Violence	2	1	1	3	...	...	2	1	2	...
36 Other Defined Diseases	2	1	3	3	1	2	5	3	4	4
37 Cases Ill-defined or Unknown	2	...	...	...	...	...	...	...	1	...
All causes	21	25	30	23	29	33	35	36	40	34
Total	46		53		62		71		74	

Berkhampstead Rural District : Polioencephalitis 1 included in 36 above.

IN RURAL DISTRICTS, 1932.

Hatfield.		Hemel Hempstead.		Hertford.		Hitchin.		St. Albans.		Ware.		Watford.		Welwyn.		TOTAL.	Causes of Death.
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.&F.	
...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	2	4
...	2	...	...	...	1	...	1	2	1	...	2	...	2	...	...	13	5
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	6
...	1	3	1	...	1	3	5	...	2	...	1	2	1	1	...	26	7
...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	...	5	8
...	1	...	...	...	1	1	...	...	...	...	...	1	...	...	...	4	9
6	3	1	...	1	6	5	1	4	3	1	3	5	4	3	...	58	10
2	...	1	...	...	...	1	...	2	...	2	1	...	...	1	...	11	11
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	2	12
...	...	1	...	...	...	...	...	2	...	...	...	...	...	...	...	4	13
11	5	5	5	8	7	10	16	10	13	12	17	17	17	3	4	191	14
1	2	...	2	2	...	1	...	1	...	...	3	...	...	1	1	14	15
3	4	1	3	...	1	5	14	4	7	8	4	2	2	...	2	74	16
9	21	15	17	11	11	10	20	19	20	18	12	18	24	3	2	310	17
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	18
1	...	1	4	2	2	4	5	4	3	3	2	6	8	...	1	62	19
2	2	3	5	4	1	3	4	2	2	1	2	4	1	...	1	51	20
2	3	5	2	4	2	9	2	6	7	2	4	9	4	3	2	84	21
1	...	...	...	...	...	1	2	1	...	1	1	...	...	1	...	15	22
...	...	1	...	...	...	3	...	...	1	...	...	1	...	...	...	11	23
...	...	...	...	1	...	...	...	1	...	1	...	...	...	...	...	3	24
...	1	2	...	2	...	2	...	...	...	...	...	...	1	...	1	11	25
...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	3	26
...	...	...	...	1	...	...	1	...	...	2	...	...	...	...	...	7	27
1	3	...	...	1	...	2	3	3	2	...	2	2	2	1	...	38	28
1	4	3	1	2	3	2	...	1	3	1	1	...	3	4	...	32	29
...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	2	30
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	31
6	2	...	...	2	1	1	4	1	3	1	...	6	1	2	...	35	32
1	5	2	1	1	3	3	11	...	...	4	2	4	5	1	...	62	33
2	...	1	...	...	...	1	...	2	...	1	...	2	2	...	1	15	34
5	1	3	1	6	3	4	3	14	3	6	1	5	4	...	1	72	35
2	4	6	...	5	4	8	8	8	4	10	7	10	3	2	3	112	36
...	1	...	...	...	1	2	1	...	...	1	...	1	...	...	...	10	37
57	65	54	42	53	49	81	101	89	75	75	68	97	86	26	20		
122		96		102		182		164		143		183		46		1344	

worked extremely well and a large number of bacteriological and pathological specimens are now examined for various authorities. During the year 924 specimens were examined under the tuberculosis scheme of the County Council, and specimens and swabs are sent by local sanitary authorities, Public Assistance institutions, and Hospitals. There is evidence that the work in the laboratory at Hill End is increasing in scope and that the careful and thorough manner in which all examinations are made is mainly responsible for such increase.

The work in connection with the laboratory at Hill End Mental Hospital continues to increase, the facilities for bacteriological examination provided at the laboratory being taken advantage of by various Local Authorities and Hospitals in the County. The figures given below indicate the extent to which the work at the laboratory has increased.

The bacteriological and pathological examinations which are carried out in the laboratory at Hill End Mental Hospital for various hospitals and authorities in the County are a new departure and they indicate an effort to provide the nucleus of a County Laboratory.

The following report and summary of work for which I am indebted to the Medical Superintendent of Hill End Mental Hospital indicates the character of the work carried out at the Laboratory and the extent to which it has increased :—

Laboratory Report, 1932 : Outside Work.

The examinations undertaken for outside authorities have covered a fairly wide range of clinical pathology in addition to the usual type of work undertaken in Laboratories working for Medical Officers of Health. They show an increase of 87 per cent over the work for 1931.

Of the sputa 16·7 per cent have been positive and of the throat swabs for K.L.B. 18 per cent. One virulence test only for K.L.B. has up to the present been required by local authorities.

The Maternity Home at Watford under the Hertfordshire County Nursing Association have had the throats of the staff swabbed monthly for hæmolytic streptococci as a routine measure and such streptococci have been found in larger or smaller numbers in 12·4 per cent of these swabs.

Among the milks examined for Grade A standard 90 per cent have passed. The microscopical search for acid alcohol bacilli in milk has provided 2·5 per cent of positives. Of the

guinea pigs inoculated for tubercle bacilli in milk 3 (or 33 per cent) developed tuberculosis ; 2 of these after inoculation with the milk of Grade A herds. During the year the Laboratory has become approved by the Ministry of Health for the biological testing (guineapig inoculation) of milk for local authorities.

A large number of agglutination tests have been performed on cow's blood and on milk in a search for bovine carriers of Br. Abortus. A fair number of these animals have given very high agglutinations, in some cases beyond 1 in 1,000. A few experiments have been carried out in inoculating milk obtained in as sterile a manner as possible on to various types of media in an endeavour to determine how early after an abortion the milk contains Br. Abortus. So far these experiments have not met with success owing to the difficulties of growing this organism. I have to thank Captain A. C. Wilson, M.R.C.V.S., of Berkhamstead for his interest in this matter and for his assistance in obtaining suitable milk for these tests.

SUMMARY OF OUTSIDE WORK UNDERTAKEN AT THE LABORATORY.

Blood	133
Pleural Fluid	18
C.S.F.	18
Urines	119
Pus	15
Sputa	924
Test Meals	7
Throat Swabs	299
Nasal and Cervical Swabs.	30
Miscellaneous	52
Milk	196
Cows' Blood	89
Fæces	35
Water	20
Total	<u>1,955</u>

PUBLIC VACCINATION.

The service in connection with Public Vaccination is now carried out as a part of the Public Health Service in the County. The number of persons vaccinated by public vaccinators is an extremely low figure and has been for some years a progressively diminishing one, and it is only when cases of small-pox occur that a sudden rise in the number vaccinated is observed. Three cases of small-pox were notified in the County during the year, and this is responsible for the increase both of primary vaccinations and revaccinations.

The total number of vaccinations during the year was 1,835 compared with 1,408 last year.

The duties of Public Vaccinators are laid down in the Vaccination Order, 1930, and the instructions to these officers are given in the Fourth Schedule of the Order. Every Public Vaccinator may be appointed on such terms and conditions of service as the County Council may think proper. The officers are paid according to a scale of fees, but in one district the remuneration consists of an annual salary. A uniform scale of fees has been adopted by the County Council for all appointments of public vaccinators as from 1st April, 1930.

As regards the number of vaccinations carried out, the following figures refer to the twelve months ending 31st December, 1932 :—

Primary Vaccinations	.	1,630
Revaccinations	. .	205
		<hr/>
Total	. . .	<u>1,835</u>

Of the primary vaccinations, 1,318 were under one year of age, and 312 were one year and upwards. The largest number of primary vaccinations during the period stated was carried out in the following districts: Barnet (214), Watford (110), Hertford (91), Harpenden (86), St. Albans (83), Cheshunt (72). The largest number of revaccinations was carried out in the Hitchin No. 3 District (35).

NURSING HOMES.

The Nursing Homes Registration Act, 1927, provides for the registration and inspection of nursing homes and it is an offence under the Act for any person to carry on a nursing home without being duly registered. Application for registration has to be made to the local supervising authority and has to be accompanied by a fee of five shillings. The authority may refuse to register an applicant if they are satisfied (a) that he or any person employed by him is not a fit person to carry on or be employed at a nursing home; (b) that the premises are not fit to be used for a nursing home owing to situation, construction, accommodation, staffing or equipment, or that the premises are used in a way unsuitable or undesirable in the case of a nursing home; and (c) that the conditions laid down in the Act as to the qualifications of those in charge of nursing homes and maternity homes are not being complied with.

A nursing home is defined under the Act as any premises used or intended to be used for the reception of and the providing of nursing for persons suffering from any sickness, injury or infirmity, and includes a maternity home ; it does not include (a) any hospital or premises maintained or controlled by a Government department or local authority or any other body of persons constituted by Special Act of Parliament or incorporated by Royal Charter ; (b) any institution for lunatics within the meaning of the Lunacy Act, 1890 ; and (c) any certified institution, certified house or approved home within the meaning of the Mental Deficiency Act, 1913.

The County Council has made by-laws under the Act with respect to nursing homes in the County.

There are at the present time 33 nursing homes in the County registered under the Act. The majority are mixed homes, which admit both medical and surgical cases and maternity cases. The size and standard vary considerably, but there is no doubt that the registration and inspection of nursing homes have improved their administration. In a few homes quite a high standard of medical and surgical work is carried out. A few homes are reserved almost exclusively for old infirm patients who require constant care and attention ; such homes serve a definitely useful purpose.

In connection with nursing homes reference may be made to Highfield Hall which is a special Nursing Home for female cases of mental disorder which has been established as part of Hill End Mental Hospital. The most modern methods of treatment are carried out at Highfield Hall and the cost is £3 3s. per week.

MATERNITY AND CHILD WELFARE.

An important part of the Public Health work in the County is that carried out for the care of mothers and infants under various Acts. The infant mortality for the year was 50, compared with 46 last year, and although this shows a slight increase it is low and is to be regarded as satisfactory. Comparison with previous years shows the marked reduction which has taken place in infant mortality ; thus, for the years 1900 and 1901 the infant mortality in the County was respectively 112 and 103, whereas for the years 1930 and 1931 the corresponding rates were 42 and 46. These figures indicate the value of the scheme of maternity and child welfare in preserving the lives of infants.

The maternal mortality has not shown any corresponding reduction but it is satisfactory to be able to report that the number of maternal deaths is fewer than last year.

The scheme of Maternity and Child Welfare in the County includes both official and voluntary effort, and is summarized as follows :—(1) Thirteen County Council Maternity and Child Welfare Centres, at which consultations are held, infants are weighed, and instruction and advice are given to nursing and expectant mothers ; in addition, also, a considerable amount of voluntary work is undertaken in various directions by ladies who are interested in the work of the Centres ; (2) 8 special ante-natal clinics at Barnet, Berkhamstead, East Barnet, Hertford, Hitchin, Letchworth, Tring and Waltham Cross ; ante-natal clinics are also held at the remaining 5 Centres ; (3) 30 Voluntary Maternity and Child Welfare Centres ; (4) 9 Weighing Centres ; (5) provision of maternity beds in four districts in the County, namely, Hertford, Hitchin, Hemel Hempstead, and Watford ; (6) Convalescent Home at St. Leonards ; (7) attendance at orthopædic and massage clinics and dental clinics ; (8) the provision of hospital treatment in exceptional cases of infantile diarrhœa and ophthalmia neonatorum ; (9) health visiting ; (10) the granting of milk free or at half cost to necessitous mothers and young children on a medical certificate ; and (11) arrangements for the hospital treatment of cases of notifiable puerperal fever in approved institutions. Additional arrangements have also been made under the Public Health (Notification of Puerperal Fever and Puerperal Pyrexia) Regulations for consultation with an obstetric specialist, for skilled nursing and for necessary bacteriological examinations in cases of puerperal pyrexia and fever.

Infant Life Protection.—The duties under Part I of “ The Children Act, 1908 ”, and “ The Children and Young Persons Act, 1932 ”, formerly discharged by Poor Law Authorities are now discharged by the Councils of Counties and County Boroughs as duties under “ The Maternity and Child Welfare Act, 1918 ”, except that where the Council of a District have established a Maternity and Child Welfare Committee the said duties shall in that district be discharged by the Council of the district.

“ The Children and Young Persons Act, 1932,” includes certain amendments to Part I of “ The Children Act, 1908 ”, and the Committee have taken into consideration the necessary steps which have to be taken as a result of these amendments.

The main provisions of the new Act relating to Infant Life Protection are summarized as follows :—

- (1) The age is raised by section 65 (1) from 7 to 9 years. Children between 7 and 9 years must be notified before 1st February, 1933.

(2) Notification must by section 65 (1) be given :

- (a) In case of first child not less than 7 days before reception.
- (b) Any other child not less than 48 hours before reception.
- (c) In case of child received without reward within 48 hours of undertaking to receive reward.

In case of child received in emergency, proof that notice was given within 12 hours constitutes a valid defence.

Notification of change of address must be given 7 days prior to the change except in emergency, when notice may be given within 48 hours after change of address.

Notification of death within 24 hours.

Notification of death or transference of child must be given to Local Authority and person from whom child was received.

Exemptions include any relative or legal guardian of an infant who undertakes the nursing and maintenance of the infant ; any person who undertakes the nursing or maintenance of an infant under the provisions of any Act for the relief of the poor or of any order made under any such Act ; Hospitals, Convalescent Homes or Institutions established for the protection and care of infants, and conducted in good faith for religious or charitable purposes ; boarding schools at which efficient elementary education is provided.

Necessary Action to be Taken.

The necessary action to be taken under the new Act is on somewhat similar lines to that which has previously been taken, and includes the following :—

- (1) Advertisements to be inserted in the County papers to supply information regarding the provisions of the new Act relating to Infant Life Protection.
- (2) The issuing of leaflets to persons receiving children for reward regarding the duties to be carried out by them under the Acts.
- (3) The visitation of the home and the sending of a report by the Visitor as to the home conditions before the certificate of approval is issued.
- (4) The issuing of leaflets to the Infant Life Protection Visitors as to the main provisions in the Acts relating to their duties in connection with Infant Life Protection.
- (5) The taking of necessary steps to obtain information regarding such persons as receive children for reward without notifying the authority.

- (6) Leaflets to be issued to the various benches of magistrates and police stations in the County.

As regards the work carried out by the Infant Protection Visitors, the following information has been given me by Miss Harrington for 1932 :—

Number of children under supervision	. 397
Total number of visits paid	. 2,498
Number of forms giving home conditions	. 109

The reports sent in by the nurses contained information regarding the size of the house, its condition and the suitability of the mother to care for and supervise young children. Where conditions are not satisfactory, steps are taken to remedy them or to transfer the child or children to a more suitable home. If conditions are satisfactory, a certificate is issued approving the reception of a specified number of children.

At the end of the year there were 193 persons registered for the reception of children under the Act. The total number of children on the books at the end of the year was 265.

Voluntary Centres.—There are now 30 voluntary centres and 9 weighing centres in the County. There has been considerable development in the establishment of voluntary centres and weighing centres in the County during the last few years. These centres have been established in most districts by the District Nursing Association, and they have proved of the greatest value, more especially in rural districts, in supplementing the official action in promoting schemes for the care of mothers and infants.

In the accompanying tables 20 and 21 particulars are given of the work carried out at the voluntary centres and weighing centres.

Maternity Beds.—Accommodation for maternity cases is provided at the Watford Maternity Home (21 beds), West Herts Hospital (8 beds), the Maples, Hitchin (6 beds), and the County Hospital, Hertford (6 beds). In addition there are a number of beds provided in the various County Institutions. There is an excellent maternity unit at the Wellhouse Hospital, Barnet. Arrangements are also made for the admission of complicated maternity cases to the Addenbrooke's Hospital, Cambridge from the northern part of the County. Maternity beds are now available at the Bishop's Stortford voluntary hospital; and additional maternity beds will also be provided in due course at Oster House, St. Albans.

TABLE 20.
TABLE GIVING PARTICULARS OF ATTENDANCES AT VOLUNTARY MATERNITY AND CHILD WELFARE CENTRES AND ANTE-NATAL CLINICS DURING 1932.

Centres.	No. of times Centre open.	No. of mothers attending.	No. of children attending Centre : under 1 year.	No. of children attending Centre : between 1 and 5 years.	No. of children attending Centre during 1932 for first time : under 1 year.	No. of children attending Centre during 1932 for first time : between 1 and 5 years.	Total children's attendances.	Average attendance of children.	No. of deaths of children.	No. of children who had orthopaedic treatment.	No. of infant consultations.	No. of mothers' consultations.	No. of times Ante-Natal Clinic open.	Total No. of expectant mothers attending.	Total No. of attendances by expectant mothers.	Average attendance of expectant mothers per session.	No. of ante-natal consultations.	No. of talks given at Centre.	No. of doctors' attendances at Infant Welfare Centres and Ante-Natal Clinics.
Aldbury	22	23	10	15	7	1	233	10.6	1	—	58	2	—	—	—	—	—	12	9
Apsley End	23	62	58	15	47	—	627	27.3	1	—	204	—	—	—	—	—	—	21	22
Baldock	52	106	55	91	44	17	1,633	31.4	4	2	768	25	—	18	26	—	26	—	52
Boreham Wood	23	131	90	112	53	32	1,559	67.8	2	2	240	2	—	—	—	—	—	—	12
Chipperfield	24	68	38	80	29	5	1,086	45.3	1	7	294	19	12	21	38	3.2	38	—	36
Chorleywood	23	44	21	41	16	8	513	22.3	1	—	513	—	11	21	56	5.1	56	—	23
Colney Heath	25	68	25	73	23	5	836	33.4	1	—	171	—	11	21	200	18.2	184	—	11
Harpenden	32	203	90	124	70	7	2,400	75.0	—	10	629	6	11	98	151	12.6	151	—	43
Hoddesdon	50	221	123	141	74	36	2,274	45.5	3	40	636	—	12	71	16	1.6	16	—	36
Kimpton	25	46	29	37	26	11	497	19.9	—	1	30	2	10	11	17	1.6	12	—	12
King's Langley	12	59	41	38	32	2	453	37.8	—	—	432	32	—	4	14	1.6	14	—	11
Knebworth	43	55	27	28	14	9	621	14.4	—	—	56	34	9	14	—	—	—	—	10
Langleybury	20	39	21	29	17	3	258	12.9	—	—	22	—	—	—	—	—	—	—	19
London Colney	21	43	18	41	11	15	576	27.4	1	—	22	—	12	—	—	—	—	—	10
North Mymms	23	52	34	56	24	4	610	26.5	—	—	88	5	12	13	35	2.9	35	—	4
Potten End	11	25	7	26	4	3	167	15.2	—	—	12	—	—	—	—	—	—	1	4
Little Gaddesden	10	10	7	4	6	—	49	4.9	—	—	6	—	—	—	—	—	—	1	4
Radlett	22	77	39	66	39	13	532	24.2	—	2	155	—	—	7	17	—	11	10	11
Redbourn	21	38	28	25	20	—	251	12.0	1	—	3	2	—	3	—	—	—	—	12
Rickmansworth	22	112	54	73	42	12	694	31.5	1	—	87	—	3	—	—	1.0	3	—	11
Royston	24	26	14	32	9	5	327	13.6	—	—	121	—	—	8	15	—	—	—	12
Tewin and Datchworth	24	47	23	45	16	16	440	18.3	—	—	131	26	—	99	288	11.1	288	—	45
Ware	47	153	101	136	91	33	1,839	39.1	2	2	481	36	26	26	—	—	4	—	6
Watton (opened 8.6.32)	6	14	8	10	8	10	39	6.5	—	—	39	—	—	—	—	—	—	—	36
Welwyn	52	87	43	82	28	4	1,205	23.2	—	—	368	119	12	38	110	9.2	105	—	12
Codicote	43	45	30	36	20	15	465	10.8	—	—	90	44	11	13	29	2.6	6	—	8
Woolmer Green	23	31	22	17	14	1	233	10.1	—	—	58	19	2	2	138	1.0	2	—	63
Welwyn Garden City (Peartree)	51	263	121	214	86	47	2,871	56.3	5	9	1,126	24	12	60	—	11.5	138	6	—
Welwyn Garden City (Lawrence Hall)	52	216	80	189	58	28	2,256	43.4	2	19	980	12	12	38	85	7.1	85	12	64
Wigginton	11	21	10	20	7	2	237	21.5	—	1	24	—	—	2	3	—	—	—	11
Totals	837	2,390	1,267	1,898	940	344	25,781	30.8	26	95	7,878	409	155	541	1,243	7.5	1,185	156	629

TABLE 21.
GIVING PARTICULARS OF ATTENDANCES AT VOLUNTARY WEIGHING
CENTRES DURING 1932.

CENTRES.	No of Times Centre Open.	No. of Mothers Attending.	No. of Children Attend- ing Centre under 1 year.	No. of Children Attend- ing Centre, 1-5 years.	No. of Children Attend- ing Centre during 1932 for first time, under 1 yr.	No. of Children Attend- ing Centre during 1932 for first time, 1-5 years.	Total Children's Attendances.	Average Attendance of Children.	No. of Deaths of Children.	No. of Children who had Orthopaedic Treatment.	No. of Talks given at Centre.
Braughing (<i>Closed after May 1932</i>)	5	14	1	15	1	—	16	3.2	1	—	5
Bushey	45	115	82	88	71	14	1954	43.4	1	—	—
Croxley Green	11	41	30	14	14	—	195	17.7	1	—	11
Great and Little Amwell	7	9	3	12	2	2	46	6.6	—	—	—
High Cross	12	43	18	53	12	1	316	26.3	1	2	—
King's Walden	42	27	11	29	8	2	616	14.7	—	2	—
Standon (<i>Closed after March 1932</i>)	2	5	4	8	—	—	13	6.5	—	—	1
Stanstead Abbots	25	28	22	15	12	3	245	9.8	—	—	—
Weston	12	28	14	24	11	—	296	24.7	—	—	—
Wheathampstead	5	28	15	20	15	20	73	14.6	—	1	—
(<i>Commenced 7-10-32</i>)											
Totals	166	338	200	278	146	42	3770	22.7	4	5	17

Consultations.—Mr. Ellison, the consulting obstetrical surgeon, reports as follows regarding his work during the year :—

In all I have paid 54 visits to patients in Hertfordshire during 1932. Of these cases 34 were patients seen before or during delivery, 9 were cases of disproportion and in 3 of these Cæsarian section was performed; four were cases of placenta previa in 2 of which Cæsarian section was performed; 2 were cases of morbus cordis in one of which Cæsarian section and sterilization was performed; 3 were malpresentations with bone disease or deformity in 2 of which Cæsarian section was performed, in one case Cæsarian section with hysterectomy; one was a case of repeated stillbirths treated by Cæsarian section; two were cases of toxæmia and 3 were various types. In all 9 Cæsarian sections were performed. All mothers made a perfect recovery and all the babies were healthy.

Twenty visits were to patients during the puerperium. There were 18 cases of which 12 had been delivered in hospitals, maternity homes or nursing homes, and 6 had been delivered in their own houses. Of these 18 cases, 16 showed varying

degrees of puerperal pyrexia, 2 were moribund when seen, one died three days after I had performed a hysterectomy for a ruptured uterus ; the remaining 13, so far as I know, recovered with treatment.

Massage and Orthopædic Centres.—During the year 1932 the number of defects and morbid conditions found in children under 5 years of age who attended and received treatment at the massage and orthopædic centres in the County was 178.

Dental Treatment.—The treatment carried out during the year in the case of mothers and in children under 5 years of age is shown as follows :—

Mothers and children inspected by the Dentists	431
Found to require treatment	431
Actually treated.	419
Attendances made for treatment	569
Fillings	25
Extractions	1,427
Administrations of general anæsthetic for extractions	379
Other operations	9

DR. SWATMAN'S REPORT.

During 1932 the work of the Maternity and Child Welfare Centres has been carried on in the same manner as in the previous year, except at St. Albans. The Centres have been held in the afternoons at weekly intervals, with infant consultations each time, except at Bishop's Stortford and Hatfield, where the infant consultations have been held at bimonthly intervals.

In the earlier part of the year Ante-Natal Clinics were held at the same session as the infant consultations at Bishop's Stortford, Hatfield, St. Albans, and Stevenage, but in the autumn it was decided that the Ante-Natal Clinic at St. Albans should be held at a separate session.

Morning Ante-Natal Clinics have been held throughout the year at Hitchin (weekly), Letchworth (bi-monthly), and since the middle of October at St. Albans (bi-monthly).

The numbers at the Centres have been well maintained.

There was an increase in the number of children who attended (1,828), but the actual number of their attendances (16,169) was somewhat less than in the previous year, owing to the prevalence of various epidemics, chiefly measles and whooping cough.

TABLE 22.
GIVING PARTICULARS OF EXPECTANT MOTHERS WHO ATTENDED THE ANTE-NATAL CLINICS IN 1932 COMPARED WITH THOSE IN 1931. (Dr. Swatman's District.)

Ante-Natal Clinic.	No. of times clinic opened in		No. of expectant mothers on books in		No. of consultations of these with Medical Officer in		Average number of consultations of expectant mothers in		No. of deaths amongst expectant mothers in		No. of expectant mothers referred to Dental Clinic in		No. of post-natal consultations in 1932.		Normal expectant mothers in 1932.		Expectant mothers with abnormal conditions dependent on pregnancy in 1932.		Expectant mothers with abnormal conditions dependent on pregnancy in 1932.		Percentage of normal confinements in	
	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	Normal confinement.	Abnormal confinement.	Normal confinement.	Abnormal confinement.	Normal confinement.	Abnormal confinement.	1932.	1931.
Bishop's Stortford	23	23	10	14	37	23	2	1	1	—	2	2	24	—	—	2	3	—	7	1	83	63
Hatfield .	22	23	32	30	75	77	4	3	—	7	—	—	20	—	—	—	6	—	11	1	95	86
Hitchin .	47	48	204	163	740	614	16	13	—	14	2	3	98	30	61	27	17	66	66	27	72	67
Letchworth	24	24	25	45	64	128	3	5	—	5	1	2	55	—	4	—	4	17	17	—	93	93
St. Albans	45	52	89	74	221	195	5	4	—	11	3	1	64	2	14	4	14	34	34	4	90	78
Stevenage.	32	46	30	23	80	43	2	1	—	1	6	4	27	1	3	2	3	18	18	2	72	82
	193	216	390	349	1217	1080	6	6	1	38	14	12	288	33	91	35	153	35	153	35	90	80

TABLE 23.

GIVING PARTICULARS OF CHILDREN UNDER 5 YEARS OLD WHO ATTENDED THE CENTRES IN 1932 COMPARED WITH
THOSE IN 1931. (Dr. Swatman's District.)

Centre.	No. of times the Centre was open in		No. of children on the books in		No. of attendances of children in		Average weekly attendance of children in		No. of deaths of children in		No. of children who had Orthopædic treatment in		No. of children referred to Dental Clinic in		No. of Nursing Mothers referred to the Dental Clinic in		No. of defects and ailments in	
	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.
Bishop's Stortford	50	50	144	151	2,429	2,683	48	54	5	—	4	4	10	9	5	1	44	68
Hatfield .	45	45	135	138	820	1,160	21	26	1	2	4	6	2	2	—	—	42	52
Hitchin .	48	48	381	387	3,277	2,919	69	61	3	3	11	11	21	16	3	2	120	183
Letchworth .	52	52	377	410	3,743	4,219	72	81	1	3	12	10	16	25	5	10	140	170
St. Albans .	51	52	595	524	4,327	4,383	83	84	2	3	30	32	61	32	4	2	201	223
Stevenage .	45	46	196	195	1,573	1,440	35	31	3	—	6	11	25	13	6	10	90	91
	291	293	1,828	1,805	16,169	16,804	55	56	15	11	67	74	135	97	23	25	637	787

TABLE 24.

GIVING PARTICULARS OF CHILDREN UNDER 5 YEARS OLD WHO ATTENDED THE CENTRES IN 1932 COMPARED WITH THOSE IN 1931. (Dr. Sparrow's District.)

Centre.	No. of times the Centre was open in		No. of children on the books in		No. of attendances of children in		Average weekly attendance of children in		No. of deaths of children in		No. of children who had Orthopædic treatment in		No. of children referred to Dental Clinic in 1932.		No. of Nursing Mothers referred to the Dental Clinics in		No. of Defects and Ailments in	
	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.
Berkhamsted.	50	—	225	—	1,858	—	37.5	—	2	—	1	—	15	—	—	—	23	—
Tring . . .	47	46	168	—	1,728	—	36.22	—	1	—	2	—	2	—	—	—	22	38

Amongst these children 15 deaths occurred during the year, equivalent to a rate of 8 per 1,000. The cases of death were : laryngeal diphtheria (3)—in one case it occurred whilst the patient was in a London hospital suffering from gastro-enteritis,—intussusception (1), pneumonia (3), whooping cough and pneumonia (1), gastro-enteritis (3)—in one case this occurred in a London hospital in which the infant was awaiting an operation for removal of a nævoid tumour,—meningitis (2), prematurity and inanition (1), and congenital heart disease (1).

Ante-Natal Clinics.—Considered as a whole, the numbers attending these Clinics (390) and the number of consultations (1,217) show a considerable increase over the numbers of the previous year. There was one maternal death during the year. This was due to pneumonia in the case of an expectant mother who was confined prematurely and failed to recover. The actual figures of the Clinics are given on a separate page compared with those of 1931.

DR. ORNSTEIN'S REPORT.

Although there have been no alterations in the actual Ante-Natal Clinics and Child Welfare Centres, those at Hertford were transferred during the past year to the new premises in Bull Plain.

The attendances at the Centres have been well maintained.

The number of post-natal consultations was 92 as compared with 35 for the previous year. No deaths occurred amongst the expectant mothers attending the Ante-Natal Clinics.

Ten deaths occurred amongst the children attending the Centres. Eight of these were due to pneumonia.

The actual figures relating to the work of the year are shown in the appended tables.

Our thanks are again due to the voluntary workers for all their help during the past year.

HEALTH VISITORS, NURSES, AND MIDWIVES.

The work of the health visitors, nurses, and midwives continues to increase in scope and importance. In addition to sick nursing and midwifery the nurses are called upon to carry out increasing duties in connection with County Health services. Every Act relating to health questions which comes into force usually means increased work and responsibility for the nurse.

TABLE 25.
GIVING PARTICULARS OF EXPECTANT MOTHERS WHO ATTENDED THE ANTE-NATAL CLINICS IN 1932,
COMPARED WITH THOSE OF 1931. (Dr. Ornstein's District.)

Ante-Natal Clinic.	No. of times Clinic opened in		No. of expectant mothers on books in		No. of consultations of these with Medical Officer in		Average number of consultations of expectant mothers in		No. of deaths amongst expectant mothers in		No. of expectant mothers referred to the Dental Clinic in 1932.	No. of post-natal consultations in 1932.	Normal expectant mothers in 1932.		Expectant mothers with abnormal conditions dependent on pregnancy in 1932.		Expectant mothers with abnormal conditions not dependent on pregnancy in 1932.		Percentage of normal confinements in
	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.			Normal confinement.	Abnormal confinement.	Normal confinement.	Abnormal confinement.	Normal confinement.	Abnormal confinement.	
Barnet	22	24	69	56	235	160	11	7	—	—	11	9	50	5	—	—	—	—	97
Berkhamstead	22	24	77	66	229	249	10	10	—	—	—	1	60	3	1	—	—	—	96
East and New Barnet	23	25	109	119	383	459	17	18	—	—	15	32	65	9	—	—	—	—	95
Hemel Hempstead	48	48	28	34	91	129	2	3	—	—	—	17	20	1	—	—	—	—	96
Hertford	50	52	92	92	382	404	8	8	—	—	17	18	66	8	—	—	—	—	89
Tring	23	23	54	45	211	166	9	7	—	—	—	10	29	14	—	—	—	1	86
Waltham Cross	26	27	69	91	196	296	8	11	—	—	7	2	60	5	1	—	—	—	96
Ware Voluntary Centre	26	26	99	87	288	237	11	9	—	—	3	3	71	6	2	3	—	—	93
	240	249	597	590	2018	2100	8	8	—	—	53	92	421	51	4	4	8	4	91

TABLE 26.

GIVING PARTICULARS OF CHILDREN UNDER 5 YEARS OLD WHO ATTENDED THE CENTRES IN 1932,
 COMPARED WITH THOSE IN 1931. (Dr. Ornstein's District.)

Centre.	No. of times the Centre was opened in		No. of children on the books in		No. of attendances of children in		Average weekly attendance of children in		No. of deaths of children in		No. of children who had orthopaedic treatment in		No. of children referred to the Dental Clinic in		No. of nursing mothers referred to the Dental Clinic in		No. of defects and ailments in	
	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.	1932.	1931.
Barnet	48	49	330	300	2,634	2,445	55	50	—	2	1	12	1	74	92			
Hemel Hempstead	51	50	244	242	1,367	1,660	27	31	4	1	2	—	—	44	30			
Hertford	52	52	322	290	3,069	2,803	57	54	2	3	2	11	7	71	66			
Waltham Cross	51	50	379	335	3,208	3,270	63	65	2	—	1	22	—	39	56			
Ware Voluntary Centre	47	50	266	232	1,839	1,786	39	36	2	1	2	2	7	29	50			
Total	249	251	1,541	1,399	12,157	11,964	49	48	10	7	8	47	15	257	294			

Their willing co-operation and sympathetic assistance in investigating difficult cases and in carrying out difficult and responsible duties is much appreciated.

The lectures to the midwives and nurses have been continued during the year and have been much appreciated. The provision of such lectures which are of a practical character is of value in raising and maintaining the standard of efficiency of the work of the midwives in the County. This is of importance in relation to the prevention of, and the securing immediate treatment for, maternal complications. Generally speaking, the standard of work of the midwives is good.

In the following report Miss Harrington, the County Health Visitor, Inspector of Midwives, and County Superintendent of Nurses, gives full particulars of the work of the health visitors, nurses, and midwives during the year.

ANNUAL REPORT OF THE INSPECTOR OF MIDWIVES AND COUNTY HEALTH VISITOR FOR THE YEAR 1932.

During the year 1932 the Health Visiting Work has been carried out by the 113 Health Visitors, including three whole-time County Council nurses.

Of the 5,070 babies born alive during 1931 (excluding Watford Urban District) 4,177 have been visited by the Health Visitors, a percentage of 82·3 per cent.

Of the babies visited, 77 died before reaching the age of one year, showing a mortality of 18·4 per 1,000; 680 babies left the County before completing their first year. In all cases where the address could be obtained, it was forwarded to the local Health Authority.

From the Health Visitors' returns it is shown that 2,530 or 60·5 per cent of the infants were breast-fed, 1,226 or 29·3 per cent were partly breast-fed and 414 or 9·9 per cent were bottle-fed; 979 or 23·4 per cent used dummies, and 1,188 or 28·4 per cent were vaccinated; 3,170 or 75·8 per cent were up to the average weight.

The work of the Health Visitors is shown in Table 27.

STATEMENT OF WORK AS INSPECTOR OF MIDWIVES AND COUNTY HEALTH VISITOR FOR THE YEAR 1932.

Inspection of Midwives and Special Visits	1,444
Visits to Health Visitors, Nurses, and Doctors	937
Attendances at Committee Meetings	106
Attendances at County Council and Voluntary Infant Welfare Centres and Schools	390
Letters, Circulars, etc., under Midwifery Act and Notification of Births Act	13,076

STATISTICS OF MIDWIVES PRACTISING IN THE COUNTY.

There were 214 trained midwives practising in the County on the 1st January, 1933. In addition there were 56 temporary midwives and 32 who have left or retired, making a total of 302 practising in 1932.

Of those in practice on the 1st January, 1933, 42 are in private practice and 132 work for Nursing Associations. Four are employed by the County Council and 36 in institutions.

In 1932 the total number of cases was 5,658, excluding stillbirths. The midwives attended 4,448 cases. Of these 1,609 were with a doctor engaged and included 49 or 3·0 per cent stillbirths; 2,839 were attended by the midwives alone and included 32 or 1·1 per cent stillbirths.

The number of infants who died before the tenth day was 23 in midwives' cases born alive, being a mortality of 8·1 per 1,000. Of the 23 infants who died before the tenth day, 9 were premature. In addition to these cases, the midwives attended 121 abortions with a doctor.

1,509 expectant mothers have attended ante-natal clinics. The number of ante-natal visits paid by the midwives was 17,709.

MATERNAL MORTALITY.

In the 2,839 cases attended by the midwives, there were two maternal deaths, or 0·7 per 1,000.

MEDICAL AID AND ANY OTHER NOTIFICATIONS RECEIVED.

The number of Medical Aid notices was 768 or 27·0 per cent.

TABLE 27.

MIDWIVES AND THEIR WORK FOR THE YEAR 1932.

DISTRICT.	POPULATION.	TOTAL BIRTHS.		BIRTHS ATTENDED BY MIDWIVES.		INFANTS' DEATHS			NOTIFICATIONS.				MATERNAL DEATHS FOR WHOLE COUNTY. MIDWIVES.	NUMBER OF MIDW			
		Legitimate.	Illegitimate.	Midwife.	With Doctor.	Under one Year.	Rate per 1,000.	Midwives' cases under Ten Days.	Medical Aid.		Stillbirths.			Private.	Nursing Associations.	County Council.	Institutions.
									Mother.	Child.	With Doctor.	Midwife.					
Urban.																	
1. Baldock	3,285	53	2	17	16	7	127·2	...	7	3	...	...	...	1	1	...	...
2. Barnet	15,420	181	8	50	31	7	37·0	..	14	3	2	2	...	6	1	...	8
3. Berkhamstead	8,485	105	6	86	23	8	72·0	4	11	4	...	1	...	...	4	...	1
4. Bp's. Stortford	9,913	112	10	75	37	10	81·9	2	8	8	...	1	...	...	4	...	4
5. Bushey	11,610	143	10	66	9	7	44·3	2	11	3	...	...	...	...	1	...	...
6. Cheshunt	14,960	214	5	56	98	17	77·6	2	8	2	...	...	...	3	5	...	...
7. Chorleywood ..	3,372	38	...	6	18	2	52·6	...	4	...	1	...	...	...	1	...	...
8. E. Barnet Valley	19,640	267	10	67	56	13	46·9	1	18	1	...	1	...	2	4	...	...
9. Harpenden	8,812	97	4	63	28	3	29·7	1	26	2	2	1	...	1	4	...	...
10. H. Hempstead	15,310	230	5	145	82	7	29·7	1	21	3	1	..	...	1	3	...	6
11. Hertford	11,940	154	12	111	68	4	24·0	...	25	6	4	3	...	...	4	...	4
12. Hitchin	14,550	192	8	60	135	15	75·0	...	50	9	3	3	...	4	2	3	2
13. Hoddesdon	7,391	114	8	92	26	7	57·3	1	28	4	1	1	...	2	3	...	...
14. Letchworth	14,580	154	7	80	77	10	62·1	...	9	1	1	...	...	6	...	...	...
15. Rickmansworth	10,970	139	5	66	29	11	76·3	...	11	4	...	...	...	1	3	...	...
16. Royston	3,836	32	4	19	5	...	...	...	3	2	1	...	...	...	1	...	...
17. St. Albans	29,470	370	15	174	86	15	38·9	3	32	7	3	4	1	1	6	...	4
18. Sawbridgeworth	2,696	32	2	14	16	2	58·8	...	4	...	...	...	...	...	2	...	...
19. Stevenage	5,557	75	2	36	21	5	64·9	...	7	3	...	1	...	...	2	...	...
20. Tring	4,435	66	...	18	27	1	15·1	...	7	...	...	...	...	...	..	1	...
21. Ware	6,386	91	4	78	15	7	73·6	1	20	4	1	2	...	...	3	...	2
22. Watford	57,400	777	42	539	275	45	54·9	1	141	26	12	6	1	4	12	...	5
23. Welwyn G'n C.	8,982	162	10	59	39	8	46·5	...	12	...	6	2	...	2	4	...	...
Total for U.D. ...	289,000	3,803	179	1,977	1,217	211	52·9	19	477	95	38	28	2	34	70	4	36
Rural.																	
1. Ashwell	3,476	38	...	23	9	...	...	...	13	2	...	...	...	1	3	...	...
2. Barnet	6,656	96	7	37	17	4	38·8	...	9	...	1	...	...	...	3	...	...
3. Berkhamstead	5,243	62	1	43	19	4	63·4	...	4	...	...	...	...	...	4	...	...
4. Buntingford ...	4,612	52	1	31	9	1	18·8	...	13	...	...	...	..	...	2	...	...
5. Hadham	5,518	58	2	31	17	2	33·3	...	5	2	1	...	...	1	3	...	...
6. Hatfield	11,840	171	4	44	61	12	68·5	...	...	1	2	...	..	1	5	...	...
7. H. Hempstead	8,557	118	4	69	50	...	...	...	12	2	2	...	...	1	6	...	...
8. Hertford... ..	7,671	92	3	37	27	9	94·7	...	8	3	1	...	...	...	5	...	...
9. Hitchin... ..	14,710	209	5	169	38	9	42·0	1	28	2	...	2	...	3	8	...	...
10. St. Albans	20,300	254	11	100	45	9	33·9	...	16	3	1	1	...	1	6	...	...
11. Ware	12,960	175	8	140	33	8	43·7	...	27	6	1	...	...	...	9	..	...
12. Watford	19,020	254	5	109	58	13	50·1	1	22	5	2	1	...	...	7	...	...
13. Welwyn	3,837	45	1	29	9	2	43·4	1	10	3	...	...	...	...	1	...	...
Total for R.D. ...	124,400	1,624	52	862	392	73	43·5	3	167	29	11	4	...	8	62	...	...
Total for U.D. ...	289,000	3,803	179	1,977	1,217	211	52·9	19	477	95	38	28	2	34	70	4	36
Total for County	413,400	5,427	231	2,839	1,609	284	50·1	22	644	124	49	32	2	42	132	4	36

TABLE 28.

BIRTHS NOTIFIED UNDER "THE NOTIFICATION OF BIRTH ACT, 1907".

From January 1st to December 31st, 1931.

DISTRICTS.	Births.		Cases attended.		Stillborn.		Premature.	Infants visited by Health Visitors.			Death-rate per 1,000 of the infants under 1 year for the County, excluding Watford.	No. of Health Visitors.
	Notified.	Returned by Registrar.	By Doctor.	By Midwife.	Doctors' Cases.	Midwives' Cases.		Visited.	Died under 1 year.	Death-rate per 1,000 visited.		
Urban.												
1. Baldock	62	—	38	24	2	—	1	60	4	66·6	19·2	1
2. Barnet	317	—	282	35	14	—	20	109	1	9·1	62·8	1
3. Berkhamstead ...	96	3	28	71	3	—	6	80	—	—	10·1	4
4. Bishop's Stortford ...	145	5	90	60	2	1	6	110	2	18·1	67·6	3
5. Bushey	157	14	124	47	2	2	—	104	1	9·6	31·0	1
6. Cheshunt	191	5	127	69	—	—	5	172	4	23·2	62·5	4
7. Chorleywood	27	6	30	3	3	—	1	24	2	83·3	26·3	1
8. E. Barnet Valley ...	269	—	190	79	6	1	16	216	7	32·4	80·7	4
9. Harpenden	113	8	70	51	2	4	—	79	2	25·3	82·3	3
10. Hemel Hempstead...	239	12	121	130	4	—	15	220	5	22·7	41·4	3
11. Hertford	167	5	57	115	1	1	9	151	—	—	33·1	4
12. Hitchin	208	—	137	71	5	2	19	160	5	31·2	51·4	2
13. Hoddesdon	154	5	81	78	5	—	10	143	1	6·9	49·1	3
14. Letchworth	216	6	146	76	4	2	8	181	2	11·0	41·4	1
15. Rickmansworth ...	178	10	76	112	—	2	2	143	2	13·9	47·6	3
16. Royston	54	—	29	25	1	1	3	42	—	—	63·8	1
17. St. Albans	452	11	249	214	13	4	22	346	7	20·2	52·4	2
18. Sawbridgeworth ...	35	1	22	14	—	1	1	32	—	—	68·9	2
19. Stevenage	80	4	38	46	—	1	—	60	3	50	48·7	2
20. Tring	53	1	35	19	1	—	3	45	—	—	62·5	1
21. Ware	86	3	29	60	1	1	6	76	3	39·4	100	3
22. Welwyn Garden City	196	13	166	43	3	—	6	180	—	—	5·3	1
Total for Urban Districts	3,495	112	2,165	1,442	72	23	159	2,733	51	18·6	50·4	50
Rural.												
1. Ashwell	37	—	12	25	—	—	3	33	—	—	—	3
2. Barnet	137	—	99	38	1	—	2	113	2	17·6	73·7	3
3. Berkhamstead ...	90	3	57	36	4	—	6	80	1	12·5	49·3	4
4. Buntingford	66	1	45	22	1	—	3	61	—	—	15·6	2
5. Hadham	61	1	34	28	4	1	4	49	—	—	64·5	4
6. Hatfield	169	29	149	49	4	—	10	167	6	35·9	24·5	5
7. Hemel Hempstead...	152	4	62	94	1	—	6	139	—	—	23·0	6
8. Hertford	93	2	56	39	4	—	3	84	3	35·7	20·8	5
9. Hitchin	210	2	54	158	4	3	14	185	1	5·4	28·4	8
10. St. Albans	229	7	98	138	2	1	18	195	6	30·7	42·2	7
11. Ware	134	5	47	92	2	2	10	118	3	25·4	42·8	8
12. Watford	220	24	137	107	6	—	9	169	4	23·6	41·3	7
13. Welwyn	65	1	32	34	2	—	5	51	—	—	27·3	1
Total for Rural Districts	1,663	79	882	860	35	7	93	1,444	26	18·0	36·4	63
Total for Urban Districts	3,495	112	2,165	1,442	72	23	159	2,733	51	18·6	50·4	50
Total for County ...	5,158	191	3,047	2,302	107	30	252	4,177	77	18·4	45·5	113

TABLE 29.

TABLE OF HEALTH VISITORS' WORK CARRIED OUT UNDER THE NOTIFICATION OF BIRTH ACT, 1907-15.

District and Health Visitor.	Parishes in each District.	Population Covered.	No. of New Homes Visited.	No. of Babies under Supervision, 31st Dec., 1932.	Health Visits to Mothers and Babies.	Health Visitors' Attendances at Maternity Centre	No. of Cases as Midwife and Maternity Nurse and Visits.	No. of 1-5 Children under Supervision, 31st Dec., 1932.	Visits to These.
No. 1 : Miss Milner .	Barnet, Arkley, Totteridge, Cuffley, Little Heath and Northaw.	17,414	159	132	1,064	44		511	1,753
No. 2 : Miss Shore .	Tring Urban District .	4,435	43	42	575	46	42 cases 1,144 visits	168	817
No. 3 : Miss Wells .	Letchworth and Willian .	14,790	118	135	1,613	60		568	1,646
Nurses working under the County Nursing Association.		299,226	3,857	4,017	60,757	2,179		12,671	68,262
		335,865	4,177	4,326	64,009	2,329		13,918	72,478

SANITARY SERVICES IN THE COUNTY.

The following is an up-to-date summary of the sanitary and special services provided by Local Sanitary Authorities in the County.

Urban Districts.

BALDOCK.

- | | | |
|---------------------|---|---|
| Water Supply | . | Adequate supply from First Garden City, Ltd., Pumping Station for practically whole district ; few wells. |
| Sewage Disposal | . | Public system for whole district ; disposal works near Icknield Way. Sewage enters large tank after screening and is pumped into a reservoir twice daily, and then run on to land under cultivation and treated by systematic broad irrigation. |
| Scavenging | . | Once weekly in covered conveyance. Existing dump has been overhauled and disposal is now carried out on the Bradford System. |
| Infectious Diseases | . | Cases sent by arrangement to Letchworth Hospital ; swabs examined at Clinical Research Association ; antitoxin supplied when required ; no steam disinfectors provided ; clothing and houses disinfected with paraformaldehyde and formalin. |
| Housing | . | Twelve houses built during 1931 ; none erected during 1932. |

BARNET.

- | | | |
|---------------------|---|---|
| Water Supply | . | Public supply for the whole district from the Barnet and District Gas and Water Co., from wells sunk into the chalk ; the supply is adequate. |
| Sewage Disposal | . | Water carriage system for the whole district except in older portions of district, where combined system obtains. Certain outlying properties are drained to cesspools ; part of Totteridge is drained into Finchley sewer. Sewage Farm is situated in Mays Lane, and is 56 acres in extent ; method of disposal : three rotary filters, detritus and sedimentation tanks, and land irrigation ; pumping is necessary for one sewer ; some extension of the system is contemplated. |
| Scavenging | . | Weekly collection for whole district in covered conveyances. |
| Infectious Diseases | . | Cases of infectious diseases removed to Barnet Joint Isolation Hospital ; swabs examined by arrangement with Clinical Research Association ; supplies of antitoxin kept for local practitioners. A steam disinfectors is available ; houses are fumigated with formaldehyde. |
| Housing | . | Forty-four houses and 30 flats have been erected ; total number of houses and flats on Housing Estates 537 ; Council have purchased Barracks Flats (18 flats and 1 cottage), previously held on lease. |

BERKHAMPSTEAD.

- Water Supply . Public supply for practically the whole district from the Berkhamstead Water Company, which also supplies adjoining districts; supply is adequate; there are a few wells.
- Sewage Disposal . Conservancy system for whole district; sewage disposal works at Broadway, Berkhamstead, consist of septic tanks and rotary percolating filters, effluent discharged to Grand Union Canal; system also serves Northchurch Village, Berkhamstead Rural; a large extension has been completed.
- Scavenging . . Weekly collection for whole district in covered carts with automatic covers. Bradford system of disposal recently adopted.
- Infectious Diseases . Cases admitted to Aldbury Hospital; cost of examination of swabs reimbursed to medical practitioners; antitoxin supplied by Council through Sanitary Inspector; steam disinfectors available; disinfection carried out by sanitary staff.
- Housing . . Forty-six houses completed under Housing Acts during 1931; work on erection of 20 new houses about to commence; tenders accepted January, 1933.

BISHOP STORTFORD.

- Water Supply . Adequate supply from deep wells, which serves whole district.
- Sewage Disposal . Public system for greater part of district; there are about fifty cesspools, which will be dispensed with when new sewer is completed. Sewage gravitates to tanks, is screened and pumped on to high level, and is dealt with by broad land irrigation; effluent to River Stort. Extension of land for irrigation may be necessary at some future date. Disposal works outside district in Essex.
- Scavenging . . Weekly in covered conveyance.
- Infectious Diseases . Cases admitted by special arrangement to Isolation Hospital; swabs sent to laboratory at Hill End Mental Hospital; antitoxin kept at Isolation Hospital; steam disinfectors at Isolation Hospital; houses disinfected with formaldehyde.
- Housing . . Forty-five houses in course of erection under 1930 Act; 24 houses contemplated.

BUSHEY.

- Water Supply . Adequate supply for whole district from Colne Valley Water Co.
- Sewage Disposal . Public system for whole district with the exception of the northern part and a few small areas. Disposal works have recently been extended, and will now deal with sewage from population of 17,000; anærobic and ærobic methods of treatment are adopted; percolating filters and filtration through sand; experiments as to digestion of sludge being carried out.
- Scavenging . . Weekly collection in covered conveyance.

Infectious Diseases .	Cases admitted to Watford Joint Hospital, which serves district ; swabs sent to Clinical Research Association ; antitoxin kept by Council. Steam disinfectors at Isolation Hospital, where disinfection carried out. Houses disinfected by Sanitary Inspector.
Housing . .	One house was completed during 1932. Total number of houses owned by Local Authority 158.
CHESHUNT.	
Water Supply .	Public supply for practically whole district from Metropolitan Water Board, private wells in a few country houses.
Sewage Disposal .	Public system for whole district except some country houses. Sewage disposal works on Cheshunt Marsh in Parish of Enfield, consists of septic tanks, revolving sprinklers, humus tanks, and filtration over several acres of ground.
Scavenging . .	Weekly collection in covered conveyance.
Infectious Diseases .	Cases removed to Cheshunt Isolation Hospital ; examination of swabs arranged by M.O.H. Antitoxin kept at U.D.C. Offices and house of M.O.H. No local disinfectors available, but there are arrangements for disinfection with Enfield ; house disinfection by formalin lamps.
Housing . .	Number of houses contemplated or being built under the Housing Acts, 136 ; 73 completed in 1932.
CHORLEYWOOD.	
Water Supply .	Adequate supply for practically the whole district from the Rickmansworth and Uxbridge Valley Water Co. ; three private wells.
Sewage disposal .	Public system for greater part of district. Few cesspools. Disposal works at Maple Cross consist of detritus and screening chamber, two sedimentation tanks, three primary and secondary filters, and two humus tanks ; effluent to tributary of River Colne.
Scavenging . .	Collection weekly in covered conveyance.
Infectious Diseases .	Cases admitted to Joint Hospital serving district ; swabs sent to Clinical Research Association. Antitoxin kept by Council. Steam Disinfectors at Isolation Hospital ; houses disinfected by Sanitary Inspector.
Housing . .	No new houses completed in 1932 ; total number of houses owned by Local Authority, 57.
EAST BARNET VALLEY.	
Water Supply .	Adequate supply from the Barnet District Gas and Water Co. from wells and borings ; whole district served.
Sewage Disposal .	Public system for whole district except for small number of isolated houses. Disposal works situated at Brunswick Park Road at junction with Osidge Lane ; sewage conveyed by five main sewers ; the sewage from two of these passes through Dortmund tanks, and then on to land ; the sewage from the three remaining sewers passes directly on to the land ; farm is land drained, all land drains lead to settling tanks, which feed a series of percolating filters ; effluent discharged into Pymmes Brook.

Scavenging . . .	Weekly collection for greater part in covered conveyance.
Infectious Diseases . . .	Cases to Barnet Joint Isolation Hospital ; swabs sent for examination to Clinical Research Association ; supplies of antitoxin kept by Council. Steam disinfectors available at Isolation Hospital. Rooms and contents sprayed with formalin.
Housing . . .	No Council houses were built during the year ; 133 houses were built by private enterprise.
HARPENDEN.	
Water Supply . . .	Adequate supply from Harpenden Water Co. from deep wells for almost whole district ; a few wells. Company also supplies Wheathampstead and Batford.
Sewage Disposal . . .	Public system except for outlying farms. Disposal works on eastern boundary of district. Slate beds, tanks, and percolating filters ; also serves part of St. Albans Rural District.
Scavenging . . .	Weekly collection in covered conveyance.
Infectious Diseases . . .	Cases to St. Albans Hospital ; swabs, etc., sent to laboratory at Hill End Mental Hospital. Anti-toxin kept by Council. Disinfectors available at St. Albans Isolation Hospital, to which clothes are sent. House disinfection by formalin spray and lamps.
Housing . . .	The Council have erected 72 houses. Financial assistance to Workmen's Housing Association for the erection of 72 houses, which were completed in August, 1932.
HEMEL HEMPSTEAD.	
Water Supply . . .	Adequate supply from two borings for whole district, with the exception of about a dozen houses, mostly at Bourne End ; also supplies parts of St. Albans Rural District (Leverstock Green) and Watford Rural District (portion of Nash Mill District).
Sewage Disposal . . .	Public system except for outlying farms and cottages ; disposal works at Bennett's End ; sewage is pumped from Apsley and passes through sedimentation tanks and percolated filters, and is finally treated by broad irrigation. System also serves portion of Leverstock Green in St. Albans Rural District.
Scavenging . . .	Weekly collection in covered conveyance.
Infectious Diseases . . .	Cases to Joint Isolation Hospital ; swabs sent to laboratory at Hill End Mental Hospital. Anti-toxin supplied from Public Health Department ; steam disinfectors at Isolation Hospital. Houses disinfected by formalin spray and lamps.
Housing . . .	Forty-two houses were completed in 1932 ; 21 houses completed since 31st December, 1932 ; 47 new houses in course of erection.
HERTFORD.	
Water Supply . . .	Adequate supply for whole district from wells in chalk owned by Corporation ; supplies part of Hertford Rural District.
Sewage Disposal . . .	Public system for whole district ; disposal works within eastern boundary of borough consist of detritus tanks, sedimentation tanks, activated sludge tanks and sludge digestion. Part of Hertford Rural District is served by

		system ; no extension beyond necessary sewage extensions.
Scavenging . . .		Weekly, in covered freighter ; disposed by controlled tipping on Bradford system.
Infectious Diseases . . .		Cases to Hertford and Ware Joint Hospital ; swabs examined at laboratory at Hill End Mental Hospital. Antitoxin at Isolation Hospital ; steam disinfectant at Isolation Hospital. Houses disinfected with formaldehyde.
Housing . . .		Houses being built or to be erected during 1932 : Hertingfordbury Road site, 79.
HITCHIN.		
Water Supply . . .		Adequate public supply for whole district except small hamlet of Charlton and few houses ; new boring just been made at Temple End ; also supplies Ippollitts and Ickleford in Hitchin Rural District.
Sewage Disposal . . .		Public system for whole district except Charlton and few scattered houses ; extended within last two years. Disposal works at Grove Road consist of tanks and percolating filters. System also serves few scattered houses outside the Urban District.
Scavenging . . .		Weekly collection in covered conveyance.
Infectious Diseases . . .		Cases sent by arrangement with the Joint Isolation Hospital ; swabs examined at cost of Council ; antitoxin supplied free of cost. Steam disinfectant at Isolation Hospital ; house disinfection by spraying disinfectant fluid followed by formaldehyde gas fumigation.
Housing . . .		Number of houses in course of erection, 166.
HODDESDON.		
Water Supply . . .		Adequate supply for practically whole district from deep well in chalk ; also serves small number of houses in Ware Rural District.
Sewage Disposal . . .		Main sewerage scheme, separate for soil and surface water ; whole district served except for few isolated houses. Disposal works in north-east of district consist of detritus and settling tanks, contact beds, and rotary percolating filters ; sewage taken from houses in Amwell Parish. Council have under consideration electrification scheme of pumping machinery and extension of works.
Scavenging . . .		Weekly collection in covered conveyance.
Infectious Diseases . . .		Cases to Hertford and Ware Isolation Hospital, where clothing is disinfected ; swabs, etc., sent to laboratory at Hill End Mental Hospital. Antitoxin kept at Isolation Hospital. Formalin disinfection of houses.
Housing . . .		During the past four years 75 houses have been built by the Council and a scheme for 19 further houses is now in hand.
LETCHWORTH.		
Water Supply . . .		Adequate supply for whole district from pumping station ; four borings at Weston Hill ; also supplies part of Hitchin Rural District and Baldock Urban.
Sewage Disposal . . .		Whole district served except for few houses and farms in isolated positions ; separate systems

for sewage and surface water sewage to sewage farm and surface water empties into Pix Brook. Disposal works just beyond north-western boundary in Biggleswade R.D.C. ; consist of settling tanks, with primary and secondary filtration ; effluent discharged into Pix Brook. System serves Isolation Hospital in Hitchin Urban District.

Scavenging . . . House refuse weekly, trade refuse daily in some instances ; covered freighters.

Infectious Diseases . . . Cases admitted to Hospital of Hitchin Rural and Letchworth Urban Joint Board ; swabs sent to Thresh and Beale, London ; antitoxin kept at Isolation Hospital. Steam disinfecter at Isolation Hospital ; disinfection of houses carried out by Sanitary Inspector.

Housing . . . Fifty additional houses in course of erection.

RICKMANSWORTH.

Water Supply . . . Adequate supply for practically whole district from Rickmansworth and Uxbridge Valley Water Co. ; a few isolated houses supplied from wells.

Sewage Disposal . . . Public scheme for whole district, except Heronsgate and isolated houses. Sewage gravitates to pumping stations and is pumped on to land ; septic tanks and land irrigation. A few houses in Chorleywood and in Watford Rural District drain into system.

Scavenging . . . Weekly in covered conveyances ; refuse disposed of by " controlled " tipping.

Infectious Diseases . . . Cases to Watford Joint Isolation Hospital ; swabs sent to Clinical Research Association ; antitoxin kept at Council Offices. Infected clothing sent for disinfection to Isolation Hospital ; house disinfection carried out by Council's staff.

Housing . . . Fifty-two houses were completed during the year 1932, making a total of 354 houses erected. A contract has been accepted for a further 44 houses.

ROYSTON.

Water Supply . . . Adequate public supply for whole district.

Sewage Disposal . . . Public system for whole district : a few cesspools and earth-closets on outskirts.

Scavenging . . . Weekly collection in whole district.

Infectious Diseases . . . Cases to Joint Hospital, but only one disease can be admitted ; swabs and antitoxin paid for if necessary.

Housing . . .

ST. ALBANS.

Water Supply . . . Adequate supply for whole district from St. Albans Water Works Co. ; parts of surrounding districts also supplied.

Sewage Disposal . . . Public system for whole district ; sewage disposal works at Park Street consist of septic tanks with sprinklers and primary and secondary filtration ; some extension of the system is contemplated.

Scavenging . . . Weekly collection in covered conveyance, daily in shopping area.

- Infectious Diseases . Cases admitted to St. Albans Isolation Hospital; swabs sent to Clinical Research Association; antitoxin kept at Council Offices. Steam disinfectant at Isolation Hospital; houses disinfected by formalin lamps.
- Housing . . The number of houses erected or to be erected under the Assisted Scheme was 134, and by private enterprise 193.

SAWBRIDGEWORTH.

- Water Supply . Adequate supply for whole district, with the exception of the outlying hamlet of Spelbrook, from the Herts and Essex Waterworks Co.; shallow wells at Spelbrook.
- Sewage Disposal . Public system for whole district, with exception of Spelbrook; sewage by gravitation to sewage farm. Disposal works in south-east of district consist of septic tanks and filter beds; effluent River Stort.
- Scavenging . Twice weekly collection in covered conveyance.
- Infectious Diseases . Cases admitted to Isolation Hospital; swabs sent to Public Health Laboratories, London; antitoxin kept by Medical Officer of Health. Steam disinfectant at Isolation Hospital; house disinfection by Sanitary Inspector.
- Housing . . The number of houses built and occupied during the year 1932 was 36.

STEVENAGE.

- Water Supply . Adequate supply but with a small margin for greater part of district; wells for outlying farms and cottages. Supply obtained from deep boreholes at Rooks Nest, also supplies Graveley and part of Great Wymondley. A well boring has been made at Bromin Green in the south-west of the town; to use this supply as supplementary it will be necessary to construct a rising main.
- Sewage Disposal . Public system for whole town except few houses on outskirts. Disposal works are to the south of the town, adjoining Great North Road. Consists of filter beds.
- Scavenging . Weekly collection in covered conveyances.
- Infectious Diseases . Arrangements for admission of cases to Hertford and Ware Isolation Hospital; swabs, etc., sent to the laboratory at Hill End Mental Hospital. Antitoxin provided in necessitous cases. No steam disinfectant provided. Rooms disinfected by formaldehyde vapour or spray.
- Housing . . During 1932 80 new houses were in process of erection.

TRING.

- Water Supply . Adequate supply from Chiltern Hills Spring Water Co. available for whole district except Bulbourne hamlet, but many houses are not connected; deep wells and also some shallow wells at Bulbourne. Adjoining district also supplied with Company's water.
- Sewage Disposal . Public system for whole district, except outlying hamlets; disposal works on west side of Tring

		Ford Reservoir. Sewage pumped to high level after having passed through screening and settling tanks, and is treated by broad irrigation ; land is under-drained, and effluent runs into a brook running into Tring Ford Reservoir.
Scavenging . . .		Weekly collection in covered conveyance.
Infectious Diseases .		Cases to Urban District Isolation Hospital ; swabs, etc., sent to Clinical Research Association ; anti-toxin at office of Sanitary Inspector. Steam disinfectant at Isolation Hospital ; houses disinfected with formalin lamps.
Housing . . .		Twenty-four houses are being erected by the Workmen's Housing Association, to be let at a rent of 4s. 7d. per week exclusive of rates, the Council to have choice of tenants.
WARE.		
Water Supply . . .		Adequate supply for whole district from deep wells the property of the Council ; also supplies portion of adjoining rural area.
Sewage Disposal . .		Public system for whole district ; disposal works at Rye Farm, near Hoddesdon, which consists of 140 acres ; sewage pumped from pumping station at Stanstead Abbots to farm, treatment by broad irrigation. System also serves adjoining rural area.
Scavenging . . .		Weekly collection in covered conveyance.
Infectious Diseases .		Cases admitted to Joint Isolation Hospital ; swabs, etc., are sent to the laboratory at Hill End Mental Hospital. Antitoxin kept at Isolation Hospital. Steam disinfectant at Isolation Hospital to which infected clothing is sent. Houses disinfected by Sanitary Inspector.
Housing . . .		The number of houses constructed in 1932 was 168. In addition there are 88 houses contemplated under the 1924 and 1930 Housing Acts.
WATFORD.		
Water Supply . . .		Adequate supply for whole district mainly from deep wells owned by Corporation. Oxhey supplied by Colne Valley Water Works Co., and Garston supplied by Rickmansworth and Uxbridge Valley Co. Part of Watford Rural supplied.
Sewage Disposal . .		Public System for whole district. Disposal works at Holywell Farm, 130 acres ; 40 acres retained for system of intermittent downward filtration, a further 40 acres being kept in reserve. There are 314 cesspools at Garston, but main sewer is being constructed to this district. The Corporation is emptying these cesspools free of charge to owners until main sewer is completed.
Scavenging . . .		Collection once per week in covered conveyances ; in special cases collection once daily.
Infectious Diseases .		Cases admitted to Isolation Hospital ; swabs now sent to Peace Memorial Hospital ; antitoxin kept at Council Offices. Steam disinfectant at Isolation Hospital ; houses disinfected by Sanitary Inspectors with formalin and spraying.
Housing . . .		There were 150 houses either completed or in course of erection during 1932. There are 130 more houses which it is intended to erect in order to replace demolition which has not yet taken place.

WELWYN GARDEN CITY.

- Water Supply . Adequate supply from boreholes in the middle chalk in the Mimram Valley ; whole district served except for few houses which have well supplies. Bulk supply given to the Rural District of Welwyn. The Urban District Council of the Welwyn Garden City has now acquired the Public Supply from the Welwyn Garden City, Ltd.
- Sewage Disposal . Public system for whole district except the village of Hatfield Hyde and about twenty outlying cottages. Disposal works are situate in the Black Fan Valley, and consist of detritus tanks, screening chambers, sedimentation tanks, and filters. The Urban District Council have purchased the sewage disposal works as from 1st April, 1932 ; work on proposed extensions will commence shortly.
- Scavenging . . Collection once a week in covered conveyance, and twice weekly from hotels, restaurants, and hospital. Sec. 64 of the Welwyn Garden City Act, 1932, provides for all dwelling-houses to be provided with a regulation dustbin.
- Infectious Diseases . Arrangements made for admission of cases to Letchworth Isolation Hospital or Hertford and Ware Isolation Hospital ; swabs, etc., sent to the laboratory at Hill End Mental Hospital. Antitoxin kept at Cottage Hospital. No steam disinfectors for district ; clothing may be sent to Letchworth Hospital. Izal is supplied to infected houses ; rooms disinfected with formalin candles and vapour.
- Housing . . During 1932 a scheme of 57 houses and 8 flats for aged couples was commenced under Housing Acts of 1924 and 1930.

Rural.

ASHWELL.

- Water Supply . Public supply to special Drainage District and few public pumps from deep well in chalk ; other sources of supply are deep wells, shallow wells, rain-water storage tanks, and ponds.
- Sewage Disposal . Public service for Ashwell Special Drainage District only ; disposal works consist of two septic tanks and broad irrigation.
- Scavenging . . No collection.
- Infectious Diseases . Cases of infectious disease to Joint Isolation Hospital, which can only admit one disease, and elsewhere by arrangement. Steam disinfectors at Isolation Hospital, but only used for hospital purposes ; house disinfection by spraying and fumigation.
- Housing . . The number of houses which have been erected is 86, of which 34 were under Assisted Scheme and 52 under the Act of 1924. The number to be erected is 26, of which 10 are being built.

BARNET.

- Water Supply . Adequate supply for greater part of district from Barnet District Gas and Water Co., Colne Valley Water Co., and a few houses served by the St. Albans Water Co. ; about half a dozen shallow wells.

Sewage Disposal	.	Most of the developed part of district has public system. There are three disposal works at St. Catherine Bourne, Shenley, Tilehouse Farm, Boreham Wood, and Medburn Farm, Elstree. The two former have sedimentation tanks and percolating filters, and the latter has sedimentation tanks and treatment by broad irrigation. Parts of Watford Rural District and few houses in Hendon Urban District are served by the system.
Scavenging	.	Weekly collection in most of the area, covered conveyance not general.
Infectious Diseases	.	Cases of infectious disease to Barnet Joint Isolation Hospital; swabs examined at Clinical Research Association. Antitoxin provided as required. Steam disinfectant at Isolation Hospital. Houses disinfected by formalin lamps or spray.
Housing	.	No further scheme contemplated at present.
BERKHAMPSTEAD.		
Water Supply	.	Considerable part of district served by Great Berkhamstead Waterworks Co., Chiltern Hills Spring Co., and Ashridge Water Co.; supply also obtained from private wells.
Sewage Disposal	.	Public system for part of district. Cesspools and earth-closets. Sewage conveyed from Northchurch to Great Berkhamstead Disposal Works, where it is dealt with by septic tanks and percolating filters. Long Marston broad irrigation and Wilstone broad irrigation.
Scavenging	.	Weekly collection at Northchurch; fortnightly, monthly, and two-monthly at other districts. Covered conveyance for Northchurch.
Infectious Diseases	.	Cases of infectious disease sent to Aldbury Isolation Hospital. Examination of swabs provided for. Council pays for antitoxin obtained by medical practitioners. No steam disinfectant available; houses disinfected by formalin lamp.
Housing	.	Four houses were erected in 1932; 3 additional houses are to be built.
BUNTINGFORD.		
Water Supply	.	Buntingford has public supply from a deep well; works are Council property. Other sources of supply are natural spring and deep and shallow wells.
Sewage Disposal	.	Public system to part of district; remainder of district has cesspools and pail-closets. Disposal works at south end of Buntingford; treatment by broad irrigation after screening.
Scavenging	.	Weekly collection in covered conveyance for Buntingford town only.
Infectious Diseases	.	Cases sent to Buntingford Isolation Hospital; swabs, etc., examined at laboratory at Hill End Mental Hospital. Antitoxin at office of Sanitary Inspector. There is a small disinfectant at the hospital. Houses disinfected by means of formaldehyde.
Housing	.	No new houses built during 1932, but 8 are under construction and 10 more are contemplated.

HADHAM.

- Water Supply . Public supply for Much Hadham and surrounding hamlets from deep well in chalk ; rest of district supplied by wells, many of which are deep wells. High Wych supplied by Herts and Essex Water Co.
- Sewage Disposal . Public system for parts of district ; disposal works at south end of Much Hadham, treatment by broad irrigation ; also at High Wych. Braughing (part of) has small irrigation area for slop water.
- Scavenging . . Weekly collection for Much Hadham and part of Braughing.
- Infectious Diseases . Cases to Joint Isolation Hospital at Bishop's Stortford ; swabs, etc., to laboratory at Hill End Mental Hospital. Antitoxin kept at Isolation Hospital. Steam disinfecter at Isolation Hospital, to which infected clothing is sent. Houses are disinfected by formaldehyde.
- Housing . . Twelve houses erected at Braughing. No houses in course of erection or contemplated.

HATFIELD.

- Water Supply . Public supply for the greater part of the area from the mains of the Barnet District Gas and Water Co. ; wells, springs and pumps in the rural areas.
- Sewage Disposal . Public system of sewers for portions of the district ; elsewhere cesspools and pail closets. Disposal works at : Mill Green, Hatfield, Newgate Street Village, and Welham Green, consisting of : settling tanks, bacteria beds, and humus tanks ; and at Cuffley and Littleheath, settling tanks, bacteria beds, and land treatment. A comprehensive scheme for the drainage of the major portion of the parish of North Mimms is now being prepared and also a new scheme for the village of Essendon.
- Scavenging . . Weekly collection generally, twice weekly in some parts of Hatfield Town ; covered conveyances always used.
- Infectious Diseases . Cases sent by arrangement to Hertford and Ware Isolation Hospital ; examination of swabs paid for in necessitous cases ; antitoxin supplied where required ; no steam disinfection ; rooms and clothing are disinfected with formalin.
- Housing . . The number of houses built in 1932 was 197, including 88 erected by the Council.

HEMEL HEMPSTEAD.

- Water Supply . A considerable part of the district has a public supply from various sources, all from the chalk. Outlying portions have private wells and filtered rain-water.
- Sewage Disposal . Water carriage system for portions of the district, cesspools, and earth-closets. Disposal works at King's Langley and Markyate, double or single filtration and percolating filters and Flamstead and Flaunden treatment by discharging on to land.

Scavenging . . . Weekly or fortnightly collection for most of district.

Infectious Diseases . Cases of infectious disease to Hemel Hempstead Isolation Hospital; swabs to Clinical Research Association; antitoxin kept at office of Sanitary Inspector; disinfectant at Isolation Hospital used when required; house disinfection by sanitary staff.

Housing . . . Houses built by Local Authority during 1932, 8; houses to be built in 1933 are 7.

HERTFORD.

Water Supply . . . Public supply for portions of district from tube well, Welwyn R.D.C., Metropolitan Water Board, also private supplies and shallow wells.

Sewage Disposal . . . Public system for parts of district. At Little Amwell open tanks, filters, and broad irrigation; at Walkern sedimentation tank and broad irrigation; at Tewin sedimentation tank and sub-irrigation; at Aston there is a scheme for sewage disposal works. In other parts of district cesspools and earth-closets.

Scavenging . . . No collection.

Infectious Diseases . Cases to Hertford and Ware Isolation Hospital; swabs, etc., sent to laboratory at Hill End Mental Hospital; antitoxin kept at Isolation Hospital; steam disinfectant at Isolation Hospital; houses disinfected by formaldehyde.

Housing . . . No houses built during 1932, but 17 are contemplated.

HITCHIN.

Water Supply . . . Public supply for ten districts in area; water in bulk being taken in some cases from Hitchin Urban District, Letchworth Garden City Co., and Stevenage Urban District.

Sewage Disposal . . . Public system for more populous parts of districts; nine small disposal works; one privately owned. General method adopted is by settling tanks in alternate use and broad irrigation. The question of making provision for the parishes of Ickleford and Breachwood Green is under consideration.

Scavenging . . . Weekly collection in covered conveyance for Knebworth; monthly and quarterly elsewhere; indestructible refuse collected.

Infectious Diseases . Cases admitted to Joint Isolation Hospital; swabs sent to County Public Health Laboratories; antitoxin kept at Isolation Hospital; steam disinfectant at hospital available when necessary. House disinfection carried out with formalin vapour.

Housing . . . Number of houses being built, 16; total number of new houses erected to end of year, 698.

ST. ALBANS.

Water Supply . . . Public supply for greater portion of district from Harpenden Water Co., St. Albans Water Co., Barnet Water Co., Hatfield Water Co., Colne Valley Water Co., and public wells.

Sewage Disposal .	Public system for parts of district ; public and private cesspools ; arrangements can be made for emptying cesspools. Sewage disposal works at Nast Hyde, London Colney, and Wheathampstead.
Scavenging . . .	Weekly collection in covered conveyance except in outlying districts.
Infectious Diseases .	Cases of infectious disease to St. Albans Hospital ; swabs sent to Clinical Research Association and Counties Public Health Laboratory ; anti-toxin supplied at Council's expense ; steam disinfectant at St. Albans Hospital ; house disinfection by sanitary staff.
Housing . . .	Houses erected by private enterprise, 167 ; Council houses erected, 16 at Redbourn ; 24 are in course of erection at Colney Heath, and sanction is being obtained for 12 additional houses.

WARE.

Water Supply .	Public supply from deep well in chalk for Wormley and Broxbourne ; rest of district served by wells, mostly deep ; a few houses in Hoddesdon are supplied.
Sewage Disposal .	Public system for parts of district ; disposal works at Wormley, Broxbourne, and Stanstead Abbots ; treatment by broad irrigation.
Scavenging . . .	Weekly collection in covered conveyance in parts of district.
Infectious Diseases .	Cases sent to Joint Isolation Hospital ; swabs to laboratory at Hill End Mental Hospital ; anti-toxin kept at Isolation Hospital ; steam disinfectant at Isolation Hospital ; house disinfection by formaldehyde.
Housing . . .	Twelve houses were completed at Wareside, and 12 are to be erected at Wadesmill.

WATFORD.

Water Supply .	Public supply for considerable parts of district from Rickmansworth and Uxbridge Valley Water Co., Colne Valley Water Co., Watford Borough, and Hemel Hempstead Borough ; thirty-three wells.
Sewage Disposal .	Public system for more populous parts of district ; cesspools and earth-closets. There are a number of small sewage disposal works in the district, or the sewage is dealt with at sewage farms in adjoining districts.
Scavenging . . .	Generally weekly collection ; in some districts fortnightly and monthly ; covered conveyance in Aldenham district ; other districts tarpaulin cover provided.
Infectious Diseases .	Cases of Infectious disease to Joint Hospital at Watford ; swabs to Clinical Research Association ; antitoxin kept at Council Offices. Steam disinfectant at Isolation Hospital ; house disinfection carried out by Sanitary Inspector.
Housing . . .	Twenty-four houses built during 1932. A further 18 houses were completed in February, 1933.

WELWYN.

- Water Supply . Public supply from Welwyn Garden City Company to parishes of Welwyn and Digswell. Small portion supplied by Hitchin Rural District Council. Welwyn Waterworks to be used for future extension ; few wells.
- Sewage Disposal . Public scheme for portion of parish of Welwyn ; cesspools and earth-closets. Disposal works consist of septic tanks and pumping station in Mill Lane and revolving filters and irrigation land on south-west side of Station Road ; ultimate effluent passes into River Mimram. A possible extension of the scheme is at present under consideration.
- Scavenging . . Weekly collection generally in covered conveyance.
- Infectious Diseases . Cases of infectious disease are admitted by arrangement to the Letchworth or Hertford and Ware Isolation Hospitals ; swabs sent to Hill End Mental Hospital laboratory ; antitoxin kept at Cottage Hospital. There is no steam disinfectant, but articles are occasionally sent to the Isolation Hospitals for disinfection. Houses are disinfected with sulphur or formalin ; disinfectant supplied in cases of tuberculosis.
- Housing . . The Council have now erected a total of 198 houses ; 54 of these were erected under the Housing Act, 1924, during 1932. A scheme for a further 20 cottages at Woolmer Green is under consideration.

HOUSING AND TOWN PLANNING.

As regards housing developments during the year, reference should be made to the part of this report which deals with the sanitary and special services provided by the Local Authorities in the County, information is given as to the progress made during 1932 in connection with the provision of new houses.

The Housing Act, 1930, gives increased powers to County Councils in connection with housing grants. The Council has decided to limit contributions to Rural District Councils for the accommodation of the agricultural population of the

district to the statutory contribution payable under Section 34 of the Act.

The Town and County Planning Act, 1932, which comes into force on the 1st April, 1933, will bring the subject of town planning more directly within the purview of County Authorities, as the Act provides that regulations shall be made for the consultation of the County Council by the Local Authorities preparing schemes of town planning.

The Act also makes provision for dealing with such matters as refuse dumps, sewage disposal works, advertisements, dog racing and dirt track racing, questions which are of very great importance in relation to the amenities of the County.

DISPOSAL OF HOUSE-REFUSE : DUMPS.

House-refuse.—There is little new to report in connection with the removal and disposal of house refuse. The work of scavenging is generally carried out carefully in all the larger urban districts and covered conveyances are now the rule and not, as in former years, the exception. Further action will be possible as regards the control of dumps of imported refuse before very long by legislative measures for the control of such dumps by both county and district authorities.

The precautions suggested by the Ministry of Health are as follows :—(1) the deposit to be made in layers ; (2) no layer to exceed 6 ft. in depth ; (3) each layer to be covered on all surfaces exposed to the air with at least 9 inches of earth, or other suitable substance, except a portion which may be allowed uncovered during the formation of the layer ; (4) no layer to be left uncovered for more than 72 hours from the time of deposit ; (5) sufficient screens or other suitable apparatus to be provided where necessary to prevent any paper or other debris from being blown by the wind away from the place of deposit.

TRADE PREMISES UNDER SUPERVISION.

Dairies, Cowsheds, and Milkshops.

Milk Supply.—In pursuance of the Milk and Dairies (Amendment) Act, 1922, the Minister of Health has made an Order, the Milk (Special Designation) Order, 1922, prescribing the conditions subject to which licences may be granted. The authorities responsible for the issuing of licences under the above Order are as follows :—(1) The Minister of Health, licences to producers of Certified and Grade A (tuberculin-tested) milk. Producers holding above licences from the Minister of Health will also be entitled to sell milk produced under such licence as Grade A milk without further licence from Local Authority ; (2) County Councils and County Borough Councils, licences issued to producers of Grade A milk ; (3) Sanitary Authorities, licences issued to distributors of Certified milk, Grade A milk, including Grade A tuberculin-tested and Grade A Pasteurized milk, and of “ Pasteurized ” milk. No licence from a Sanitary Authority is necessary in the case of a licensed producer who distributes milk directly to the consumers.

During the year 89 samples of Grade A milk were examined, and of this number 79 were up to standard and 10 were below standard. The corresponding numbers last year were 103, 85, and 18. The figures for the year indicate a further improvement in the standard of graded milk produced in the County.

The following figures indicate the action which has been taken during the year under the Milk and Dairies (Consolidation) Act, 1915 :—Number of animals examined, 29,799 ; number found to be suffering from tuberculosis, 27 ; number of samples examined, 215.

Sale of Foods and Drugs Acts.—The work under the Sale of Food and Drugs Acts is carried out by the three Inspectors appointed for the purpose, working under the Chief Constable. Analysis of samples taken are made by the County Analyst, Dr. Bernard Dyer, of the Analytical Laboratory, 17 Great Tower Street, London, E.C., to whom I am indebted for the following report regarding the analytical work carried out during the year.

It is interesting to note from the figures given below that apart from milk no unsatisfactory samples were found ; this may be accepted as indicating to some extent a higher standard of purity and less efforts at adulteration, although the figures are not large enough to make this inference conclusive.

DR. DYER'S REPORT.

Food and Drugs (Adulteration) Act, 1928.

SUMMARY OF SAMPLES ANALYSED BETWEEN 1ST JANUARY AND 31ST DECEMBER, 1932.

	<i>Samples Analysed.</i>	<i>Samples Unsatisfactory.</i>
Arrowroot	2	—
Baking Powder	1	—
Butter	19	—
Coffee	7	—
Cream	11	—
Cream of Tartar	1	—
Damson Jam	1	—
Evaporated Milk	1	—
Ground Almonds	5	—
Ground Ginger	1	—
Lard	5	—
Lime Juice	1	—
Malt Vinegar	1	—
Margarine	4	—
Meat	1	—
Milk	320	43
Milk Chocolate	2	—
Pepper	2	—
Pork Pie	1	—
Raisins	2	—
Rice	1	—
Sausages	2	—
Self-raising Flour	1	—
Solidified Grape Juice	1	—
Sparkling Wine made from Solidified Grape Juice	1	—
Sultanas	2	—
Toffee Balls and Toffee Balls and Peppermint Creams	2	—
Uncooked Puff Pastry	1	—
Vinegar	1	—
	<hr/> 400	<hr/> 43

Of the 43 unsatisfactory samples, all consisting of milk, 14 contained added water in proportions varying from 3 per cent up to 23 per cent ; while 29 were unsatisfactory by reason of deficiencies in fat ranging from 4 per cent to 45 per cent of the minimum quantity of fat proper to normal milk as indicated in the Regulations of the Ministry of Agriculture.

SUMMARY AND CONCLUSIONS.

The health of the County during 1932 has on the whole been satisfactory, although in some respects it has not reached the standard of last year.

The estimated population of the County is given as 413,400, compared with 401,900 for 1931, representing an increase of 11,500; the population is now slightly over one person per acre.

There is a further fall in the birth-rate, which was 13·6 compared with 14·6 in 1932. The actual number of births was 5,658 compared with 5,899 in the previous year.

There is a slight increase in the death-rate, which was 10·6, compared with 10·3 in 1931; the causes of this increase are discussed in the body of the report.

There is a slight increase in the infant mortality, which was 50 compared with 46·4 last year. This increase is not due to an increased number of deaths from congenital debility and premature birth, which was 164 compared with 170 for the previous year, but chiefly to an increase in the number of deaths from whooping cough.

There is a further decrease in the maternal mortality, which was 3·1 compared with 3·8 for the previous year, the number of maternal deaths being 18 compared with 23 last year and 27 for 1930.

There is a slight increase in the death-rate from pulmonary tuberculosis, namely 0·51 compared with 0·48. This increase is somewhat unusual in that it is confined to the rural districts, there being a decrease in the urban death-rate.

It is satisfactory to be able to report a decrease in the death-rate from cancer and other forms of malignant disease, which was 1·4 compared with 1·5. The number of deaths from this cause was 601 compared with 628 last year. The decrease in the death-rate from malignant disease is confined to urban districts, there being an increase in the death-rate in rural districts.

The number of patients from the County attending the Venereal Disease Clinics in London during the year is slightly increased, being 269 compared with 257 for 1931.

There is a slight fall in the death-rate from epidemic disease, which was 0·10 compared with 0·11 in 1931.

There was an increase in the number of deaths from influenza and whooping cough and pneumonia. During the early months of the present year there was a serious epidemic of influenza.

TABLE 30.—CHIEF STATISTICS OF URBAN AND RURAL DISTRICTS, 1932.

As compared with those for 1931 and with the averages for ten years 1901–1910, 1911–1920 and 1921–1930.

DISTRICTS.	POPULATION.				Acreage (land and inland water), 1931.	Number of Rooms occupied, 1921.	Rooms per Person, 1921.	BIRTH-RATE. §					CRUDE DEATH-RATE. §					INFANT MORTALITY. ||					EPIDEMIC MORTALITY. §		DEATH-RATE FROM PHTHISIS. §					DEATH-RATE FROM CANCER. §					DISTRICT.
	By estimate, 1933.	By Census, 1931.	By Census, 1921.	By Census, 1911.				1932.	1931.	10 years. *	10 years. ‡	10 years. †	1932.	1931.	10 years. *	10 years. ‡	10 years. †	1932.	1931.	10 years. *	10 years. ‡	10 years. †	1932.	1931.	1932.	1931.	10 years. *	10 years. ‡	10 years. †	1932.	1931.	10 years. *	10 years. ‡	10 years. †	
Urban. SUMMARY	289,000	280,945	228,546	194,242	70,048	275,492	1·26	13·7	14·6	16·1	18·0	23·6	10·6	10·4	10·4	11·6	11·8	53	51	46	67	90	·10	·12	·53	·5	·6	·8	·8	1·4	1·6	1·4	1·2	·9	Urban.
1 Baldock ...	3,285	3,171	2,475	2,094	542	3,146	1·31	16·7	16·4	16·1	19·9	24·0	13·6	13·6	13·2	14·8	15·5	127	19	47	85	110	...	...	·91	·9	·6	·9	1·0	1·8	1·8	1·7	1·2	1·2	1
2 Barnet ...	15,420	14,721	11,740	10,440	3,114	13,946	1·27	12·2	13·1	15·1	16·5	23·3	10·5	12·1	10·9	11·1	11·0	37	63	49	67	100	·06	·13	·23	·5	·5	·5	·8	1·6	2·2	1·5	1·4	·7	2
3 Berkhamstead ...	8,485	8,053	7,250	7,302	1,208	9,576	1·40	13·1	11·7	15·0	16·0	16·5	10·5	10·0	11·2	12·6	10·1	72	10	50	62	93	...	...	·2	·5	·7	·6	·7	1·7	·9	1·4	1·1	·5	3
4 Bishop's Stortford	9,913	9,509	8,840	8,721	3,371	10,528	1·35	12·3	13·6	13·9	16·8	21·6	11·9	10·4	11·6	12·7	12·6	82	68	50	76	91	·20	·10	·4	·6	·6	·6	·8	1·6	1·7	1·5	1·3	1·1	4
5 Bushey ...	11,610	11,243	8,020	6,978	3,081	9,577	1·36	13·6	14·0	14·2	15·3	19·3	9·5	8·8	9·2	9·6	9·7	44	31	51	59	80	...	...	·3	·3	·5	·6	·5	1·0	1·6	1·3	1·1	·9	5
6 Cheshunt ...	14,960	14,651	13,640	12,954	8,479	15,077	1·12	14·6	15·2	17·5	20·8	26·6	10·9	11·3	9·8	11·6	11·6	78	62	45	71	91	·06	·13	·1	·5	·6	·8	·6	1·0	1·3	1·1	1·0	·8	6
7 Chorleywood ...	3,372	3,296	2,331	...	1,989	3,440	1·47	11·2	11·9	14·3	...	...	10·9	8·4	9·5	...	...	53	26	55	...	...	...	...	1·1	·6	·5	...	...	1·1	·9	1·1	...	...	7
8 East Barnet Valley	19,640	18,542	13,490	13,381	2,644	17,390	1·32	14·9	15·3	16·2	16·8	22·3	9·4	10·3	9·6	9·8	10·2	47	81	49	48	85	·05	...	·4	·3	·4	·6	·6	1·5	1·4	1·3	1·1	·7	8
9 Harpenden ...	8,812	8,349	6,670	6,172	1,633	8,846	1·43	11·4	10·1	11·5	14·6	19·1	9·8	11·0	9·3	10·2	10·1	30	82	37	51	81	·11	·11	·2	·2	·4	·6	·7	1·7	2·0	1·4	1·3	·8	9
10 Hemel Hempstead	15,310	15,122	13,920	12,888	7,184	16,158	1·24	15·3	14·3	15·5	20·3	24·5	12·2	10·3	10·7	12·9	13·2	30	41	41	60	90	·06	·13	·9	·5	·4	1·0	1·0	1·1	1·3	1·3	1·1	1·0	10
11 Hertford ...	11,940	11,376	10,750	10,383	1,503	12,212	1·24	13·9	15·5	15·6	19·1	22·9	10·3	11·2	11·6	13·8	14·1	24	33	47	78	104	·16	·25	·6	·6	·6	·9	·9	1·3	1·8	1·4	1·7	1·2	11
12 Hitchin ...	14,550	14,382	13,352	11,905	3,675	16,664	1·29	13·7	14·9	16·3	19·7	23·4	11·6	9·6	11·8	13·2	13·1	75	51	61	67	102	...	·27	·5	·4	·5	·7	·7	1·6	1·2	1·4	1·3	·8	12
13 Hoddesdon ...	7,391	6,811	5,400	5,196	1,576	6,716	1·27	16·6	18·0	17·0	18·3	23·5	11·2	10·0	12·2	13·1	12·1	57	49	50	70	97	·13	...	·2	·2	·3	1·0	·9	1·6	2·2	1·5	1·6	1·0	13
14 Letchworth ...	14,580	14,454	10,210	...	3,651	11,433	1·15	11·0	15·0	17·3	...	...	8·1	7·2	8·1	...	...	62	41	45	...	...	·13	...	·4	·4	·5	...	...	1·0	1·2	1·0	...	...	14
15 Rickmansworth ...	10,970	10,810	7,520	6,288	4,727	9,058	1·24	13·1	17·5	18·3	18·4	26·7	10·4	10·1	10·9	10·0	11·4	76	48	44	65	88	...	·18	·6	·3	·5	·7	·9	1·3	1·7	·9	·9	·6	15
16 Royston ...	3,836	3,831	3,780	3,985	1,003	5,008	1·42	9·3	12·3	13·3	15·6	21·1	14·3	16·3	12·8	13·0	12·2	...	64	48	74	76	...	·26	·5	...	·4	1·0	·8	2·6	2·3	1·9	1·4	1·5	16
17 St. Albans ...	29,470	28,625	25,620	18,133	2,689	32,008	1·29	13·0	13·3	14·4	17·6	21·2	11·0	12·0	10·8	11·6	11·8	39	52	55	65	78	·10	...	·9	·9	·6	·7	·9	1·6	1·9	1·4	1·2	1·1	17
18 Sawbridgeworth ...	2,696	2,604	2,285	2,304	2,678	2,953	1·30	12·8	11·3	16·5	17·0	24·1	10·7	12·8	10·5	13·5	12·2	59	69	56	76	91	·37	...	...	...	·2	·6	·8	1·1	2·3	1·1	·7	1·4	18
19 Stevenage ...	5,557	5,476	5,023	4,856	4,545	6,486	1·31	13·8	14·8	16·4	19·1	26·3	13·8	15·2	10·7	11·6	12·1	65	49	49	63	77	·35	·90	·3	·7	·2	·6	·8	1·4	1·9	1·2	1·1	1·2	19
20 Tring ...	4,435	4,364	4,278	4,481	4,407	5,784	1·36	14·8	14·7	16·6	18·9	21·0	10·5	15·0	13·1	13·2	13·1	15	62	33	54	85	...	...	·2	·6	·6	·7	·5	·6	3·4	1·8	1·4	1·1	20
21 Ware ...	6,386	6,171	5,950	5,842	629	6,550	1·14	14·8	14·8	18·6	19·6	28·0	13·0	14·1	11·8	13·3	14·4	74	100	44	69	107	·46	...	·5	·9	·6	·7	1·1	1·8	1·3	1·2	1·1	·9	21
22 Watford ...	57,400	56,799	46,002	40,939	3,251	52,936	1·18	14·1	14·6	16·8	18·0	26·2	10·5	9·2	9·7	10·7	10·1	55	52	50	73	88	·15	·19	·5	·6	·7	·9	·8	1·3	1·4	1·2	1·0	·7	22
23 Welwyn Gdn. City	8,982	td																																	

In conclusion, I desire once more to express my thanks on behalf of the County Council to the ladies who act as voluntary workers at both the County Council and the Voluntary Maternity and Child Welfare Centres for the valuable assistance they give and to the time they devote to this important work.

